S. HRG. 98-897 PT. 3

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1985

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

NINETY-EIGHTH CONGRESS

SECOND SESSION

ON

H.R. 6329/S. 3026

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENT OF DEFENSE FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1985, AND FOR OTHER PURPOSES

PART 3—(Pages 1-545)

Defense Manpower Requirements
Fiscal Year 1985 Budget Review
Joint Weapons Programs
Reserve Affairs
Space Programs

Printed for the use of the Committee on Appropriations

U.S. GOVERNMENT PRINTING OFFICE
31-682 O WASHINGTON : 1984

2181-41

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON DEFENSE

TED STEVENS, Alaska, *Chairman*

LOWELL P. WEICKER, JR., Connecticut	JOHN C. STENNIS, Mississippi
JAKE GARN, Utah	WILLIAM PROXMIRE, Wisconsin
JAMES A. McCLURE, Idaho	DANIEL K. INOUYE, Hawaii
MARK ANDREWS, North Dakota	ERNEST F. HOLLINGS, South Carolina
ROBERT W. KASTEN, JR., Wisconsin	THOMAS F. EAGLETON, Missouri
ALFONSE M. D'AMATO, New York	LAWTON CHILES, Florida
WARREN RUDMAN, New Hampshire	J. BENNETT JOHNSTON, Louisiana
THAD COCHRAN, Mississippi	WALTER D. HUDDLESTON, Kentucky
MARK O. HATFIELD, Oregon (Ex Officio)	

STAFF

DWIGHT E. DYER, RICHARD B. LADD, SUSAN E. SHEKMAR,
WAYNE A. SCHROEDER, SEAN O'KEEFE, AND CHARLES J. HOUY

MINORITY STAFF

EDWARD A. SWOBODA

CONTENTS

WEDNESDAY, APRIL 4, 1984

DEFENSE MANPOWER REQUIREMENTS

Department of Defense:
Page
  Assistant Secretary of Defense (Manpower, Installations and Logistics)...... 1

THURSDAY, APRIL 26, 1984

RESERVE AFFAIRS

Department of Defense:
  Deputy Assistant Secretary of Defense for Reserve Affairs 101
  National Guard Bureau 115
  Army Reserve 132
  Air National Guard 142
  Air Force Reserve........ 150
  Naval Reserve........ 160
  Marine Corps Reserve 173
  Army National Guard 183

TUESDAY, MAY 15, 1984

SPACE PROGRAMS

Department of Defense:
  Defense Advanced Research Projects Agency (DARPA)........ 289
  Strategic Defense Initiative Organization 310

WEDNESDAY, MAY 16, 1984

JOINT WEAPONS PROGRAM

Department of Defense:
  Research and Engineering........ 375

THURSDAY, MAY 24, 1984

FISCAL YEAR 1985 BUDGET REVIEW

Department of Defense:
  Secretary of Defense 441
  Joint Chiefs of Staff........ 464

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1985

WEDNESDAY, APRIL 4, 1984

U.S. Senate,
Subcommittee of the Committee on Appropriations,
Washington, D.C.

The subcommittee met at 10:10 a.m., in room SD–124, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senator Stevens.

DEPARTMENT OF DEFENSE

Assistant Secretary of Defense

(Manpower, Installations and Logistics)

STATEMENT OF HON. LAWRENCE J. KORB, ASSISTANT SECRETARY OF DEFENSE (MANPOWER, INSTALLATIONS AND LOGISTICS), OFFICE OF THE SECRETARY OF DEFENSE

DEFENSE MANPOWER REQUIREMENTS

BUDGET REQUEST

Senator Stevens. The subject of today's hearing is defense manpower requirements for the active military and civilian components.

The fiscal year 1985 budget request associated with these programs is about $105 billion, up from $99 billion. This includes $60 billion for military pay, $31 billion for civilians, and approximately $14 billion for associated support costs.

This funding does not include most of the costs for the Selected Reserves. We will be holding a separate hearing later this month to address the Reserves.

The fiscal year 1985 request includes funding for a military end strength of 2,165,800. This is 29,900 above the 1984 level.

There is also an increase of 7,000 civilians to 1,085,000. The budget request includes funding for a 5.5-percent pay raise for military and 3.5 percent raise for civilians.

There is an increase of 8,000 troops in Europe above the level funded in 1984. This would bring our troops ashore in Europe to 326,400, about 17,400 more than were there at the beginning of fiscal year 1980.

Our principal witness today is the Assistant Secretary of Defense, Manpower, Installations, and Logistics, Dr. Lawrence Korb.

Welcome again before this committee.

I apologize for being late.

We will, as usual, put your printed statement in the record.

Please go ahead with your testimony, Dr. Korb.

STATEMENT OF DR. KORB

Dr. **Korb.** Thank you very much, Mr. Chairman.

It is a pleasure to be with you today.

Before beginning my statement, I would like to acknowledge the contribution that you and this committee have made to the Department's progress during the past 3 years. I really believe it is because of our cooperation that the Federal Government today can assure the American people that their Armed Forces are of the highest quality in our history.

As you know, when the Reagan administration came into office the total military force had serious manpower deficiencies in both the Active and Reserve Forces. We suffered both quality and quantity shortages. Our forces were not only undermanned but also were unable to attract enough qualified recruits to fill the ranks. Since that time the manpower situation has changed dramatically.

COMPENSATION IMPROVEMENTS

Significant compensation improvements have been made since fiscal year 1981; we believe that military compensation is now at a level that is fair and competitive.

There were over 73,000 more people on active duty in fiscal year 1983 than in fiscal year 1980. Excessive losses from the career force have been stopped; reenlistments are up significantly.

SELECTED RESERVE STRENGTHS

The Selected Reserve now exceeds 1 million members. This is the highest Selected Reserve strength in history.

Fiscal year 1983, when compared to fiscal year 1979, shows an increase in our Selected Reserve of almost 200,000 people, or about 25 percent.

RECRUITING

We are recruiting new, high quality personnel and previous service personnel at an improving rate.

Ninety-one percent of our new recruits have earned a high school diploma as compared to 75 percent of all young people of military age.

In 1980, only 68 percent of new recruits had earned a high school diploma.

REENLISTMENT RATES

Our reenlistment rate increased from 55 percent, 190,000 reenlistments, in fiscal year 1980 to 68 percent, 227,000 reenlistments in fiscal year 1983.

We have been successful for a number of reasons:

ENLISTMENT BONUSES

Our use of enlistment bonuses and the Army college fund results in higher quality recruits with greater aptitude for technical training.

Because of the improved recruit quality, attrition during the first 12 months of service has dropped from 15 percent in fiscal year 1981 to 13.5 percent for fiscal year 1983.

As we face a tighter recruiting market in the next few years, enlistment bonuses will continue to be an important tool in achieving our recruiting goals. The exact amount of future enlistment bonus payments will need to be balanced with the availability and magnitude of other recruitment incentives.

The selective reenlistment bonus program continues to be the cornerstone of our efforts to retain personnel with critical military skills. The bonus is currently being used on a selective basis when cost effectiveness is demonstrated and only after other less costly options have been fully explored.

While succeeding with both Active and Reserve recruitment and retention, the Department has continued to review ways to maximize the tax dollars being spent on defense.

ACTIVE/RESERVE STRENGTHS IN MILITARY FORCE STRUCTURE

One of the most promising elements of our expenditure equation is the mix of Active and Reserve Forces in the total military force structure.

From fiscal year 1984 to fiscal year 1989, we are planning for the total military force structure to grow from 2.826 million billets to 3.129 million billets, an increase of 10.7 percent. Of this growth, 182,000 billets will be in the Reserve components, representing 60 percent of the planned increase.

By fiscal year 1989, 37.4 percent of the total force billets will be in the Reserve components, compared to 32 percent in fiscal year 1980. Thus, during the decade of the 1980's, the Reserve components will increase at almost twice the rate of the Active Forces.

This shift to the Reserves is most dramatic in the Army, which is planning over 91 percent of its increase in the Reserves. By the end of this decade the Army will have more of its manpower in the Reserves than in the active component.

COMPENSATION LEVELS

One of our objectives for fiscal year 1985 is to maintain military compensation at fair and competitive levels. In future years, we plan increases at least comparable to those in the private sector. We are seeking a 5.5 percent military pay raise for fiscal year 1985, which more than matches the projected 4.7 percent growth in civilian sector wages.

PERMANENT CHANGE OF STATION IMPROVEMENTS

We have also planned for further improvements in reimbursement for expenses associated with permanent changes of station moves:

An increase in member monetary allowance in lieu of transportation [MALT] from 13 cents to 15 cents per mile;

An increase in the maximum household goods weight allowances from 13,500 pounds to 18,000 pounds;

Authority to implement the temporary lodging expense allowance [TLE].

SPECIAL AND INCENTIVE PAY INCREASES

In addition to the pay raise and improvement in travel reimbursements, we have included funding in the legislative contingency for fiscal year 1985 for increases in a number of special and incentive pays based upon the recommendations of the Fifth Quadrennial Review of Military Compensation [QRMC].

CIVILIAN COMPONENTS

A third and often overlooked element of our total force is the civilian component. Civilian manpower resources are the most cost-effective part of our total force. The DOD civilian work force is a preeminent contributor to the readiness of our Nation's military forces.

Civilians are heavily involved in research and development, procurement and supply operations, other depot maintenance logistics support, medical care, and base operations.

At the end of fiscal year 1983, the Department of Defense employed 1,064,000 civilians in support of military functions.

Forty-two percent of the fiscal year 1983 civilian work force were employed in logistics functions.

Fourteen percent were employed in training activities, medical care, and other associated activities directly in support of our military personnel.

Nine percent worked in support of general purpose forces operations.

Two percent worked in strategic forces operations.

Two percent worked in airlift and sealift operations.

Seven percent supported Guard and Reserve operations.

For fiscal year 1985, the Department is requesting 1,085,000 end strength, an increase of 7,000 over the fiscal year 1984 authorized levels. The growth will occur principally in readiness related areas such as spares management, maintenance support, and auditing and control functions.

The fiscal year 1983 and fiscal year 1984 DOD appropriations acts excluded DOD industrially funded activities from civilian manpower ceilings. This has allowed the Department the opportunity to show the Congress that it can operate efficiently and economically without statutory ceiling constraints.

We have prepared a report for the Congress which highlights the salutary effects of operating these industrial organizations with civilian manpower balanced against funded workloads.

MANAGEMENT HEADQUARTERS REDUCTIONS

The Department has severe problems with the management headquarters reductions. Our workloads, especially those directed

PREPARED STATEMENT OF HON. LAWRENCE J. KORB

ASSISTANT SECRETARY OF DEFENSE

MANPOWER, INSTALLATIONS AND LOGISTICS

STATEMENT OF ASD(MI&L)

Mr. Chairman and members of the Committee, it is a pleasure for me to appear before you today to present an overview of the manpower situation within the Department of Defense. Before beginning my statement, I must acknowledge the contribution that this Committee has made to the Department's progress during the past three years. Because of our cooperation, the federal government can assure the American people that their Armed Forces today are better prepared than ever to defend the national interest at home and abroad.

When Secretary Weinberger came before the Congress in 1981 to present the Reagan Defense program, he said, "In this Administration there has never been any question that the United States must rebuild its military strength. The world we live in and the world we can reasonably expect to live in is not a place where the weak, the irresolute or those who are unwilling to defend themselves can hope to survive."

The Secretary went on to point out that those nations unwilling to make the necessary sacrifices to defend their vital interests have not long survived.

During the final years of the Vietnam war, the United States sought to reduce defense expenditures significantly and permanently while at the same time retaining the capability to fulfill its national security obligations. To achieve both economy and strength, the Department of Defense reduced the numbers and capabilities of the Active Forces and increased its reliance on the Guard and Reserves. A Total Force Policy was developed to emphasize the concurrent consideration of both Active and Reserve components in reaching a military strength able to support our national strategy.

When the Reagan Administration came into office, however, the Total Force had serious manpower deficiencies in both the Active and Reserve forces. We suffered both quality and quantity shortages. Our forces were not only undermanned but also were unable to attract enough qualified recruits to fill the ranks. The test scores and educational achievements of our new recruits had reached perilous lows, morale had plummeted, and the loss of career personnel was described as the greatest hemorrhage of talent in military history.

The cumulative effects of years of inadequate pay and compensation and the lack of national pride in our men and women in uniform had taken their toll on the Total Force. Peacetime readiness and wartime sustainability were serious concerns at home and abroad. Many of our allies, especially in NATO, expressed concern about our ability to meet our defense commitments.

The Reagan Administration's plans for rebuilding the Armed Forces were, and continue to be, based on sound principles of recruitment and retention by offering to qualified volunteers an environment in which they can become skilled professionals, be paid a competitive wage and make a contribution to the security of the nation.

The Administration realizes that dynamic conditions have by the Congress, are increasing. A GAO analysis indicates that DOD headquarters manpower has remained at constant levels over the last 5 years.

In this era of budget austerity, it is important for all of us to look for and take advantage of every opportunity to save tax dollars. But we must not follow the prophets of false economy, who would have us reduce manpower costs as a fast and easy way to lower overall spending.

Although we must improve our ability to evaluate carefully every proposal, review every operation, and analyze every opportunity to save and economize, we cannot overlook the fact that our people are our most important asset and must receive our highest priority.

Making significant reductions in our total force manpower requests, particularly in the Active and civilian components, would be a mistake. These increases which we have asked for this year are necessary to man and repair the weapon systems that Congress has authorized during the past several years.

Failure to provide the bulk of these increases may save some funds in the short run but will cause manpower readiness problems in the long term. Any changes that Congress may wish to make in our manpower programs cannot be made in isolation.

For example, if you authorize a ship, then you must give us the people to man and fix that ship when it comes into the force. Conversely, if you wish to reduce our manpower in the future, you should consider reducing weapon systems now.

I thank the committee for inviting me here today and look forward to our working together in the future.

I will be happy to answer questions.

[The statement of Dr. Korb is as follows:]

contributed to the success in recruiting and retention and that the conditions which assisted our force recovery may not continue forever. We feel quite strongly, however, that the kind of efforts we have pursued are the linchpins for continued success. Excellent training, competitive pay and adequate housing, and an environment conducive to quality family life are vital elements in recruiting and retention.

Three years later, the hemorrhage of experienced talent has stopped. In fact, on February 2nd, Secretary Weinberger reported to the Congress that "the brightest picture we have is the personnel picture." There is overwhelming evidence that our efforts are successful. In fact, both Active and Reserve force strength targets are being met and are being achieved during a time when the total force is increasing in size. For example:

o There were over 73,000 more people on active duty in Fiscal Year 1983 than in Fiscal Year 1980. Excessive losses from the career force have been stopped; reenlistments are up significantly.

o The Selected Reserve now exceeds one million members. This is the highest Selected Reserve strength since Fiscal Year 1961, and the Fiscal Year 1983 end strength was only 3,500 people shy of the all time record number in Fiscal Year 1959.

o Fiscal Year 1983, when compared to Fiscal Year 1979, shows an increase in our Selected Reserve of almost 200,000 people or 24 percent.

On the recruiting front, each of the Services continues to meet its recruiting goals. Test scores and educational levels of our new recruits are higher than those of the overall civilian youth population.

o In fact, 91 percent of our new recruits have earned a high school diploma as compared to 75 percent of all young people of military age.

o In 1980, only 68 percent of new recruits earned a high school diploma.

An interesting fact about our recruiting efforts is that 92 percent of our new recruits scored in the average or above average range on the enlistment qualification test -- the test required of all applicants for military enlistment. This fact is especially encouraging at the upper end of the test profile, where almost half of our recruits scored above average as compared to 37 percent in the youth population. Most of these high-scoring young people have the ability to enter our finest colleges and universities rather than enlisting.

Much of the success of our recruiting and retention programs can be attributed to the significant increases in military compensation since 1980. Two large pay increases--11.7 percent in Fiscal Year 1981 and an average 14.3 percent in Fiscal Year 1982--combined with implementation of the Variable Housing Allowance (VHA) and significant increases in special and incentive pays, bonuses, and travel reimbursements have produced levels of military compensation which we believe are fair to military members and that enable us to compete with the civilian sector for manpower.

Our objective in the FY 1985 budget is to maintain military compensation at fair and competitive levels. In future years we plan increases comparable to those in the private sector. We are seeking a 5.5 percent military pay raise, which more than matches the projected 4.7 percent growth in civilian sector wages. We have also planned for further improvements in reimbursement for expenses associated with permanent change of station moves. Specifically we are requesting funding for:

o An increase in member Monetary Allowance in Lieu of Transportation (MALT) from 13¢ to 15¢ per mile;

o An increase in the maximum household goods weight allowances from 13,500 lbs to 18,000 lbs;

o Implementation of the Temporary Lodging Expense Allowance (TLE).

The Temporary Lodging Expense (TLE) was first authorized in the Uniformed Services Pay Act of 1981. As authorized, the program would reimburse military members and their dependents up to $110.00 per day for a maximum of four days for subsistence and lodging expenses actually incurred while occupying temporary quarters in the continential United States incident to a permanent change of station move. Thus far Congress has prohibited funding to implement TLE. We would like to implement this vital reimbursement and seek the Congress' support in doing so.

In addition to the pay raise and improvement in travel reimbursements, we have included funding in the legislative contingency for Fiscal Year 1985 for increases in a number of special and incentive pays based upon the recommendations of the Fifth Quadrennial Review of Military Compensation (QRMC). The Fifth QRMC conducted a comprehensive review of special and incentive pays to determine if they are fulfilling their intended purpose based on current and projected force management considerations and cost effectiveness. The QRMC concluded that special and incentive pays will continue to be necessary in order to attract and retain the proper skill and experience mix to support mission readiness. Those pays that were judged to be effective were recommended for retention and in some cases enhanced, and those that were determined to be ineffective were recommended for elimination, or restructured to improve their effectiveness and cost efficiency. Although special and incentive pays comprise a relatively small part of the total compensation budget, they are essential to our ability to attract and retain the proper number of quality careerists in specific areas. These recommendations are now being considered in DoD and if finally approved implementing legislation will be forwarded to the Congress.

As previously noted, the loss of experienced, career people has declined measurably. Reenlistments are reaching all-time highs, and the career force, in response to manning requirements, is growing in size, experience, and quality at a rate greater than the rate of increase in overall manpower strength. In fact, there are almost 112,000 more people with four or more years of service in the active force enlisted ranks than there were when this Administration took office. Retention of these experienced people reduces turmoil and is critical to manning, operating and maintaining the new sophisticated equipment entering the inventory.

DoD has compiled an impressive record of enlistment and reenlistments in part because of incentive bonuses. They are a highly flexible and efficient means of recruiting and retaining personnel for critical occupations. Bonus levels, and the skills for which bonuses are offered, can be easily adjusted to reflect changing supply and demand. Bonuses allow DoD to react quickly to recruiting and retention problems that may arise because of an improved economy or a reduced youth population. As we face a tighter personnel market in the next few years, enlistment and reenlistment bonuses necessarily will play an even more important role in reaching our Total Force goals. The exact amount of future bonus payments will need to be balanced with the availability and magnitude of other financial incentives and other improvements in the quality of life we have to offer.

As an important ingredient of recruitment and retention, the Administration has made great strides towards improving the quality of life for military families. In the last several decades there has been a significant shift in the demographics of our Armed Forces. Today over 52 percent of our force is married, compared to under 30 percent in the 1950's. The Department's commitment towards family members is based on both a moral obligation and on the strong correlation between the satisfaction level of military families and the retention and recruitment of the servicemember. There have been several studies of both our active and reserve forces to confirm this correlation.

The Department feels that it is obligated to provide military family members with a basic level of services commensurate with the services normally provided by our stateside civilian communities. In our overseas areas, because of the absence of available civilian and community programs and an absence of the extended family ties upon which all families rely for support, an enhanced level of family support programs is justified.

Poor working and living conditions hurt the readiness of our forces and discourage people from enlisting and reenlisting. Improving the physical surroundings as a part of the quality of military life is a significant challenge but one whose rewards will be felt in the quality of our Armed Forces and their readiness to meet mission requirements.

Among the most frequently expressed concerns of our family members are improved health care, housing, and job opportunities for family members. We have been working diligently to resolve these issues and have increased our Military Construction program, emphasizing both family and bachelor housing, and have been seeking authority to obtain additional housing units wherever necessary.

After a decade of underfunding the construction, maintenance, and repair of Defense facilities, we began in FY 1981 to fund our requirements to prevent further plant deterioration and upgrade working and living conditions for our people. To improve conditions, we have increased our Military Construction Program. Since 1980 we have built or improved:

- 70,000 family housing units;
- 90,000 unaccompanied personnel housing spaces;
- 50 medical centers;

- 60 physical fitness facilities;
- 60 dependent schools;

and many child care, family service, and religious facilities. For FY 1985, we are asking for authority to build or upgrade:

- over 41,000 unaccompanied personnel billeting spaces;
- 72 schools;
- over 26 family service or child care centers;

and many administrative, supply, and medical facilities. Readiness, sustainability, modernization, and people programs drive the need for an adequate military construction program.

Through your help, we are now able to fund dependent student travel. This will allow students to visit their families overseas at least annually and is a substantial morale booster for all our families. I cannot stress enough the importance of this benefit to our Service members.

The President has signed an Executive Order which provides for preferential hiring treatment for military and civilian spouses. This will allow our military spouses to fill civil service positions non-competitively when they are forced to terminate their employment because of the sponsor's change of station. Today 53 percent of military spouses are employed, the majority of these contributing over 25 percent of the total family income.

While on the subject of families, I cannot neglect to mention the important subject of dependent schools. As you know, since 1979, the Department of Defense Dependents Schools (DoDDS) has been forced to operate under the threat of being transferred out of the Defense Department to the Department of Education. In response to our legislative initiatives, the transfer has been twice postponed by Congress; although on both occasions, a permanent repeal request was not passed. The current mandatory transfer date is May 1986.

A permanent repeal of the transfer requirement is desirable for several reasons. The overseas schools are unquestionably an academic success - as evidenced by the high Scholastic Aptitude Test (SAT) scores which are higher than the national average. School administration, logistical support, and budget preparation are best carried out by the Defense Department because the school system has been an integral part of the defense family for nearly 40 years. Defense Department retention of policy control is consistent with President Reagan's position on local control and operation of educational facilities and programs. Service personnel appreciate and expect the high quality education DoDDS provides their children. A transfer of DoDDS to the Department of Education would not result in better educational opportunities for the children of U.S. servicemembers.

In the coming year, the military retirement system will receive particular attention. The report of the Fifth QRMC will contain the results of its review of the total military compensation program, with particular attention being paid to the retirement system. Upon completion of a DoD wide review of the report, we will submit legislative proposals, as appropriate.

In early 1982, we instructed the Service Secretaries to increase the role of women in the Services, to ensure that women are not discriminated against in recruiting or career opportunities, and to break down aggressively any remaining barriers that prevent the fullest use of the capabilities of women in providing for our national defense.

Women are and will continue to be provided full and equal opportunity with men to pursue appropriate careers in the military services for which they can qualify. This means that military women can and should be utilized in all roles except those explicitly prohibited by combat exclusion statutes and related policy. This does not mean that the combat exclusion policy is to be used to justify closing career opportunities to women. Rather, the combat exclusion rule is to be interpreted to allow as many as possible career opportunities for women to be kept open.

Minority officers now constitute approximately 11 percent of all officers on active duty. Minority enlisted percentages remained fairly consistent at about 30 percent over the three year period since January 1981. Percentages of women on active duty showed the most significant increase. In January 1981, women comprised approximately 8.0 percent of all officers; by September 1983, that increased to 9.5 percent. During the same period, women enlisted percentages rose from 8.7 percent to 9.3 percent. The Services also have two minority four-star officers, one black and one Hispanic, bringing the total to 44 minority General/Flag officers. Nine women now hold General/Flag rank.

Last year Congress set a ceiling on the number of U.S. military personnel who can be permanently stationed ashore in European NATO countries at the end of FY 1984 at 315,600 but allowed a higher ceiling of 320,000 if reports and certifications are submitted. Congress also authorized up to 2,600 additional people above the ceilings to support the Ground Launched Cruise Missile (GLCM) program. The Department fully intends to take the necessary actions to achieve the higher conditional ceiling, plus GLCM.

We recently completed an extensive review of the FY 1985 requirements in European NATO countries and found that we need 326,400 U.S. military personnel permanently stationed ashore in European NATO countries at the end of FY 1985. This strength is about 9,000 below our initial estimate. To better manage this issue in the future, the Commander-in-Chief, Europe has recently been appointed by the Joint Chiefs of Staff as the single person with authority to prioritize all U.S. military strength levels in Europe. Now that General Rogers has been given the direct responsibility for reviewing all military space requirements in NATO, I am confident we will have a good grasp of this problem.

The Secretary of Defense, the Joint Chiefs of Staff, and I hope the Congress will recognize the success of our management efforts and will refrain from imposing a European strength ceiling for FY 1985. We are managing this issue aggressively and will continue to ensure that the number of military people in Europe is minimized, consistent with our need to have a strong deterrent partnership with our allies. We will inform the Congress of our plans for European strength each year in the Defense Manpower Requirements Report.

With the help of the Congress, the Services will continue to have the manpower to meet the requirements of the Total Force Structure. Since our national policy is to maintain as small an active peacetime force as security policy, military strategy, and our overseas commitments permit, DoD continues to review the Active/Reserve force mix.

The Total Force Structure must provide for credible deterrence across a wide spectrum of risks. To be affordable, the total force must be carefully balanced to provide the best Active/Reserve mix consistent with the needs of rapid mobilization for a global response and for sustainment of initial forces.

In keeping with the Congressionally mandated creation of an Assistant Secretary of Defense for Reserve Affairs, many of the management functions related to Guard and Reserve activities have been relocated. A recently published Department of Defense Directive (Number 5124.1, dated January 12, 1984), which implements Section 136 of Title 10 of the United States Code, makes clear the cooperative nature of the responsibilities assigned to both Assistant Secretaries. In connection with its Total Force responsibilities, the Office of the Assistant Secretary of Defense (Manpower, Installations and Logistics) will continue to have an important role in ensuring that Total Force policies for personnel, readiness, sustainability, and support are developed and applied so as to achieve the maximum force capability for the resources available for all components.

The Reserve Components are key elements of the Total Force. The over one million members of the Selected Reserve represent a body of highly trained, highly skilled professionals whose sense of duty and demonstrated ability is one of the main cornerstones of our national defense posture.

Today, Reserve Components constitute 44 percent of the tactical and mobility force structure and 19 percent of auxiliary and support structure capability of the United States based on validated peacetime workloads. Reserve Component strength will increase over the next five years at a rate almost three times that of the Active Forces. In the event of a conflict, the individuals and units of the Guard and Reserve will deploy with the active forces. Current mission assignments demand that many units be as fully capable, and as professional, as their Active Component counterparts.

Operational integration of Reserve and Active components has been demonstrated recently in both Grenada and Lebanon. The Air Force Reserve participated in 35 missions in support of the Grenada rescue operation. In fact, a Reserve aircrew flew the first plane load of students out of Saint Georges to Charleston Air Force Base, South Carolina. In Beirut, Reserve aircrews have participated in at least six C-141 missions in direct support of the Marines.

Reserve Components provide a responsive surge of military strength and sustainability during national crises. Total defense costs are reduced by maintaining significant military capabilities in a reserve status rather than maintaining all military forces on active duty. However, the proper mix of active and reserve forces is more than just a matter of cost. We must consider overseas deployments and peacetime missions for which, in many cases, part-time reserve forces are not appropriate. We must ensure that there are sufficient active forces for the early stages of reinforcement to NATO or to trouble spots elsewhere in the world. But the balance of our forces should be in the reserve components.

In the past year, we have re-examined the way we make decisions about the mix of active and reserve forces. We found that force-mix policy was inadequate and that costing guidelines were unclear. Sometimes needed information about capability and cost was not always presented to decision makers in a useful way. A report on these findings and on our agenda to correct these deficiencies was provided to this Committee in early March. During the review, we confirmed that there were few simple force mix decisions. Each unit decision must be addressed on its own particular merits. We also found that a decision to add or transfer units or missions to the reserve forces required long-term planning and preliminary funding.

For these reasons, the reserve force should not be made larger simply by denying increases in active military strength. The active strength is needed to man new ships, aircraft, and weapon systems. With insufficient strength to man this equipment, the Services will have to underman other active forces and transfer missions to the reserves before the reserves are ready to accept them. All this results in loss of readiness and deterrence -- something we really cannot afford.

Thus, the mix of active and reserve forces should be decided in a deliberate process in which the differences in cost and capability of the active and reserve choices are weighed so that a balance is achieved among the competing demands -- a credible deterrent and a realistic, sustainable warfighting capability at least cost. The Total Force mix must flow from deliberate, long-range force planning and can only be determined through the reconciliation of needs and risks within available resources.

In 1982, the Military Manpower Task Force recognized the need to increase our mobilization manpower pool and recommended that Congress authorize longer service obligations. Also, as an interim measure, it recommended incentives to increase current Individual Ready Reserve (IRR) strengths. Congress approved the Department's request to authorize the Secretary of Defense to extend the military service obligation (MSO) from not less than six to no more than eight years and to resume IRR bonuses. The bonuses will improve the IRR inventory until the longer military service obligation eliminates the wartime manpower shortages.

The Congress also provided the President emergency authority to suspend certain laws relating to promotion, retirement, and separation. This authority, normally referred to as "stop-loss" authority, allows the President to retain on active duty personnel who might otherwise be released or retired during the emergency period.

The extension of the military service obligation will begin to help our shortfalls in FY 1990 and will ultimately enable DoD to eliminate gross mobilization manpower shortfalls. However, the only near-term way of solving these shortfalls is with the increased pretrained manpower who will be brought into and kept in the force through IRR enlistment and reenlistment bonuses.

I would like to personally thank the Congress for their support of mobilization manpower preparedness by passing the MSO extension, stop-loss authority, and reserve retired recall authority.

Civilian manpower resources are another of the building blocks used to provide a cost-effective mix of resources to carry out the Department's national defense missions. The DoD civilian workforce is a large contributor to the readiness of our nation's military forces. Civilians are heavily involved in research and development, procurement and supply operations, other depot maintenance logistics support, medical care, and base operations.

Throughout this nation's history, there has been a policy of minimizing requirements for standing armed forces by using civilians to perform missions and functions which are not specifically military in nature. There are some jobs which must be performed by military personnel, especially those needed for deployment and military rotation. However, the Department is working to identify all other jobs for conversion to the civilian work force, as long as these conversions will not hurt combat readiness and overall combat capabilities.

At the end of Fiscal Year 1983, the Department of Defense employed 1,064,000 civilians in support of military functions.

The distribution of civilian manpower resources among the military services and defense agencies is based on the changing mission of the different components, the differing workloads associated with those missions, and the Department's use of alternatives to the civilian work force. These alternatives include use of temporary employees and overtime, contracting workloads to the private sector, and the use of capital equipment as a substitute for more costly labor. As a result of all of these variables, the distribution of the total employment levels among the services and agencies will vary from year to year.

The majority of personnel in the DoD civilian work force are employed in functions which are essential to near-term military readiness. For example:

o 42 percent of the FY 1983 civilian work force were employed in logistics functions.

o 14 percent were employed in training activities, medical care, and other associated activities directly in support of our military personnel.

o 9 percent worked in support of general purpose forces operations.

o 2 percent worked in strategic forces operations.

o 2 percent worked in airlift and sealift operations.

o 7 percent supported Guard and Reserve operations.

About four percent are involved with administrative or overhead functions.

While on the subject of personnel involved with administrative and overhead functions, I must mention the hardships created by that provision of the Fiscal Year 1984 DoD Authorization Act which assigned a five percent across-the-board reduction to Defense Management Headquarters.

Both the Secretary and the Deputy Secretary of Defense have made specific statements to the Congress on the negative effects of this reduction on DoD operations and organization. The General Accounting Office has found that as a percentage of total DoD end strength, management headquarters end strength had increased only one-tenth of one percent over a five-year period. While overall growth of management headquarters has been held to minimal levels, DoD headquarters' workload is growing substantially. For instance, since 1980 the Office of the Secretary of Defense and the Military Departments have been asked to take action on almost 2,400 different legislative and non-legislative requirements, and we have been asked to prepare over 950 different reports to the Congress. Another portion of the management headquarters increases has been in the area of management improvements and economies and efficiencies, which require oversight and management involvement from the headquarters level to be effective throughout the Department. The management headquarters reductions have the potential for being more costly than the savings realized by the five percent reduction.

For FY 1985, the Department is requesting funding for 1,085,000 end strength, an increase of 7,000 over the FY 1984 authorized levels. The growth will occur principally in readiness-related areas such as spares management, maintenance support, and auditing and control functions.

The FY 1983 and FY 1984 DoD Appropriations Acts excluded DoD industrially funded activities from civilian manpower ceilings. This has allowed the Department the opportunity to show the Congress that it can operate efficiently and economically without statutory ceiling constraints. A report to the Congress which highlighted the salutary effects of operating these industrial organizations with civilian manpower balanced against funded workloads was submitted on March 1st.

The Department has placed special emphasis on improving the ways we accomplish our assigned missions and workloads. One of the important elements in achieving our national defense mission is through the use of Defense Agencies.

The Defense Agencies have been organized under authority granted to the Secretary of Defense to integrate under a single agency any supply or service activity common to more than one military department whenever the Secretary determines that it will be advantageous to the Government in terms of effectiveness, economy or efficiency. Throughout the past 25 years, the Secretary has used this authority 18 times to establish different Defense Agencies to provide effective, common support and services to the Military Departments and to eliminate duplication of effort.

The Defense Agencies are essentially civilian organizations, all with some small mix of military staffing to insure that there is always the correct perception of the needs and requirements of the Military Services. The basically civilian make-up of the Defense Agencies ensures economies of pay, longer corporate memories, and higher technical skills than is readily achieved from a military manpower pool with its frequent personnel rotations.

The Defense Agencies are crucial to DoD readiness efforts, and they provide essential support in logistics, intelligence, communications, education, mapping, auditing and other functions. All of the Defense Agencies' operations are predicated on the idea of effective, economical support to our military forces. The Defense Agencies are an integral part of Defense Department operations, and the contributions they make to readiness and mission accomplishment are an essential part of the Nation's defense posture. I urge the Congress to permit the continuation of this efficient approach to supporting our military forces by approving funds for our requested strength levels for the Defense Agencies.

The Department is proud of the contributions made by its civilian workforce. Civilians are an essential ingredient in the Total Force we use to defend our country.

Under current law, the Secretary of Defense has the authority to transfer, reassign, abolish or consolidate Department of Defense functions. In the past, such authority has been used to increase readiness, reduce costs, strengthen management and improve operations. Where the Secretary intends to realign statutory functions, he must report the details of the proposed actions to the Congress. The statute provides that either House of Congress may veto the proposal, and that if there is no veto, the Secretary can move ahead with his reorganization. Although the Supreme Court's decision of the Chadha case invalidates legislative veto devices, it did not disturb reporting requirements under which an executive department or agency must inform Congress before taking a proposed action. We strongly oppose all efforts that in any way would limit the Secretary's management flexibility in this manner. I emphasize, however, that we fully support consulation with the Congress over proposed reorganizations of statutorily-assigned functions.

While we have made great strides in rebuilding the Total Force, the rebuilding must continue.

The manpower programs of past years, as presented in the Administration's previous budgets, would have put the DoD further along the road of recovery. Program and budget cuts caused balanced adjustments in total force structure; and to enhance and ensure our defense capability for the future, prior year cuts must be restored.

The successful results of our efforts to rebuild an effective Armed Forces structure are documented in great detail in the Fiscal Year 1985 Manpower Requirements Report. But, I do not want to imply that we have solved all of our problems; there are still a number of manpower challenges which remain.

We are confronted with force utilization questions which are not totally within our power to control. We are faced with world political changes and with an ever-increasing number of technology changes which tend to keep DoD at the drawing board searching for solutions to highly complex challenges.

Some of those challenges raise the following questions: Do we make further shifts in the manpower mix? Do we shift more missions to Reserve and Guard Units, or do we contract for more private sector support in lieu of using DoD civilians? Our force utilization questions will be with us long after the short-term needs have been filled. We must not be shortsighted but we must be realistic in pursuing answers to these questions.

The challenge of increasing the productivity of our current labor force, both military and civilian, becomes more critical when viewed in the light of limited budget resources. Can our people produce more if we design better weapons systems, or reduce the turbulence of relocation moves, or make their jobs more rewarding through job enrichment and job enlargement? We will continue to work to meet changing conditions.

The challenge of filling skill shortages has been with us for a long time. What can be done to reduce specific shortages in the physician, engineer, electronic and computer technician ranks? With an upturn in the domestic business economy, how do we attract qualified replacements to fill the positions vacated by those moving to the private sector? DoD will be faced with these challenges into the distant future.

To meet current challenges, and at the same time provide the basis for a sound foundation for the future, the Defense Department requests your support for:

o Funding for increases in Fiscal Year 1985 Active military manpower strengths of about two percent over Fiscal Year 1983 levels.

o Funding for increases in Fiscal Year 1985 Selected Reserve manpower strengths of 9.9 percent over Fiscal Year 1983 levels.

o Funding for increases in Fiscal Year 1985 Civilian manpower of 1.9 percent over Fiscal Year 1983 levels.

o Funding for increases in recruiting resources.

o Funding for training resources to include ammunition, fuel, repair parts, and other resources that support flying hours and steaming days.

o Funding for the recommendations from our review of the QRMC when they are submitted to the Congress.

o Increases in construction and maintenance funding.

In this era of budget austerity, it is important for all of us to look for and take advantage of every opportunity to save tax dollars. But we must not follow the prophets of false economy who would have us reduce manpower costs as a fast and easy way to lower overall spending. Although we must improve our ability to evaluate carefully every proposal, review every operation, and analyze every opportunity to save and economize, we cannot overlook the fact that all our people are our most important asset and must receive our highest priority.

Providing funding for the increases in Total Force Manpower we have requested, particularly in the active and civilian components, is vital this year. These increases are necessary to man and repair the weapon systems that Congress has authorized during the past several years. Failure to provide these increases may save some funds in the short run; but will cause manpower readiness problems in the long term. Any changes that Congress may wish to make in our manpower programs cannot be made in isolation. If you authorize a ship, then you must give us the funds for the people to man and fix that ship when it comes into the force. Conversely, if you wish to reduce our manpower costs in the future, you should consider reducing weapon systems now.

VARIABLE HOUSING ALLOWANCES

Senator **Stevens**. Dr. Korb, I find that last statement interesting. I don't think any of us are trying to reduce strength. We are trying to ask you why the average costs of manpower are going up so rapidly.

Let us go first to variable housing allowances which, as you know, has been one of this committee's great interests. The request this year for variable housing allowance is nearly $1.2 billion. That is 32 percent above 1984. It triples the original budget estimate for this program which began in 1981.

We found last year that it was almost universal, almost 100 percent of the military living off base in the continental United States are getting variable housing allowances. If we add the increases in the basic allowance for quarters plus variable housing allowances, the increased allowances for military housing have gone up on average, 92 percent. Housing costs for the public at large have only increased by 47 percent.

When we were told about the variable housing allowance, we were told it was going to be used to provide allowances for people in high-cost areas.

Yet we found last year only one place in the United States where military people were not receiving housing allowances.

Can you justify that program to us?

Dr. **Korb**. I think I can, and I think I also have some good news for you on it.

Senator **Stevens**. Good news would be if you would stick by the 1984 level because that is going to be my recommendation to the committee and I think you should know it. We have to cut somewhere and that is where we are going to start.

Dr. **Korb**. Part of the problem with VHA is that many people, when the program was started, had different conceptions of what it was supposed to do.

The law said that at any time the member's housing expense exceeds 115 percent of BAQ, as determined by a survey, then we would pay it.

Now, I can understand how many people thought it would be only for high-cost areas, but in fact that is not the way the legislation was written.

Senator **Stevens**. When the cost of housing exceeded 115 percent, you could get VHA?

Dr. **Korb**. That is correct.

Senator **Stevens**. Isn't that a high-cost area?

Dr. **Korb**. Obviously, it would depend on the level of BAQ. Again, remember that there have been times——

Senator **Stevens**. Is BAQ supposed to be effective for the community?

Dr. **Korb**. No, sir, BAQ is the same every place. It is a flat fee that is paid, no matter where you are. Then if in the community where you are assigned, the average housing costs are more than 115 percent of BAQ, the law says we must pay VHA.

Senator **Stevens**. Dr. Korb, you submitted this request, I assume.

INCREASES FOR 1 YEAR HOUSING COST

What is your justification for the 32-percent increase in 1 year in housing costs for one segment, that is VHA?

Dr. KORB. I understand that, Mr. Chairman. Let me explain to you what was involved there.

Over the last couple of years the Congress, for many reasons, has held down both BAQ and VHA. So, what happened is that, as a result of restrictions on the VHA program in fiscal year 1984, the member is now absorbing 130 percent of BAQ.

In other words, before VHA kicks in, housing costs would have to exceed 130 percent of BAQ.

What we did in our original submission this year, ending the study that the Congress asked we do on this particular area, was go back to the 115 percent of BAQ absorption factor.

In other words, as a result of actions taken in the 1983 and 1984 authorization and appropriations bills, the way the pay raises were done and the way BAQ was raised, the members' BAQ absorption had risen to 130 percent.

In our original request, prior to the study the Congress asked us to do, was to go back to the 115 percent. As a result of concern among a number of people in the Congress, including you, we have just completed a joint Service study on this and we have estimated that we can save about $140 million in fiscal year 1985.

Senator STEVENS. $140 million out of $1.2 billion?

Dr. KORB. The $140 million is a net savings. We will save about $300 million in the VHA program.

Senator STEVENS. I have to tell you that is not enough. We have raised military pay far in excess of the rise in civilian pay. I am chairman of the Civil Service, Post Office and General Services subcommittee, as I have pointed out to you many times. In 1984, Military pay has increased 38 percent since 1980. VHA and BAQ are up an average 92 percent since 1980.

You come in again this year and say you want a 5.5-percent increase for military pay compared to 3.5 percent for civilians.

CIVILIAN PAY IN MILITARY

Aren't you in charge of civilians in the Department of Defense, too?

Dr. KORB. I am, but I am not in charge of civilians for all the Federal Government, and the wages for civilians for the Federal Government are determined differently. They are determined by the Office of Personnel Management and they use different indices.

As I have indicated to you in previous testimony, Senator, I don't think the two pay systems can and should be compared.

Senator STEVENS. I don't think so either, but I think we ought to fairly compare.

For instance, you compare military to civilian pay. As you do so, you only use the regular military compensation in making your comparisons. You do not include VHA and incentive pay and bonuses. That averages about $2,000 for the military person.

It is unfair to come to the Congress and say military pay is still low when you leave out the military incentives, bonuses and particularly VHA.

Dr. **Korb**. Again, as I mentioned in my statement, we didn't say it was too low. We said military pay is now at a level that is fair as well as competitive.

What we have done in the past couple of years, Senator, is artificially constrain BAQ and then as a result VHA is larger than in fact it should be.

BAQ TOTAL

Senator **Stevens**. What is your total for BAQ this year?

My staff tells me it has gone up roughly the same amount as military pay. Military pay is up 38 percent, BAQ is up 38 percent.

Dr. **Korb**. It has gone up, but in 1983 the estimate for the increase required for military wages to keep pace with the employment cost index was 8 percent overall.

Congress gave us the 4-percent pay raise. Then they told us that we had to assume that BAQ went up by 8 percent in making the determination of VHA. That is why the members' absorption increased.

Our original budget submission was based on restoring the absorption to 15 percent.

Senator **Stevens**. What you are doing this year is restoring in VHA all the cuts made by the Congress since 1981 in BAQ and VHA.

Isn't that true?

Dr. **Korb**. Not in BAQ; in VHA. We were trying to get the members back to the 115 percent. The law was orignially passed at 115 percent.

Senator **Stevens**. Until 1981 we didn't even have VHA.

Dr. **Korb**. Until 1981, sir, we had lots of retention problems when we moved people to areas where the cost was far in excess of BAQ. We had people with 10 and 12 years of service refusing to take orders to places like San Diego because the cost of housing was so high, and we were losing millions of dollars that we have invested in them in training.

VHA was one of the initiatives developed in the fall of 1980 to deal with very serious retention problems.

RECOVERABLE HOUSING CUTS

Senator **Stevens**. On a selective basis it makes sense, but it makes no sense to turn to Congress now and say we are going to give VHA to 99 percent of the people in the military who live off base in the United States, and that we are going to increase it at this rate.

I tell you frankly, I think that this is one of the reasons the whole defense budget is in trouble. Every single item we cut comes back a year later. The bill comes up so that you recover totally.

This will restore the cuts made by the Congress in housing allowances since 1981.

Dr. **Korb**. There are two things I would like to say about that.

Our budget total in the original submission would not have changed without careful study of the program. The feeling among the members of the Department was that VHA was such an important retention incentive that it was worthwhile risking our money to get the housing cost reimbursement for people back to where the law intended it to be.

I think that the implementation of VHA was a good idea. I think it has helped in retaining people, and I think that we ought to preserve the original intent of the law.

Now, if Congress did not intend that VHA be paid when average housing costs were more than 115 percent of BAQ, maybe we need to go back to the drawing board and change it, but that is the formula.

I think as long as that is written in law, we in the Department have the obligation to tell the Congress the cost of that.

Senator **STEVENS**. I remember reading that report. It indicated VHA was going to be a selective application of a new concept. That is the way it was sold to us.

I will be glad to get it out. We will quote in our report this year what we were told when we funded that the first time.

Dr. **KORB**. Senator, that was done in the previous administration. That was passed in the fall of 1980. I don't know what promises were made.

All I know is that I have a law that I am charged with carrying out. My recommendation to the Secretary was that we present the Congress the full cost of implementing that law and also that we do this report that I have mentioned that saves some $140 million.

RELATED AREA CUTS NEEDED TO INCREASE HOUSING ALLOWANCE

Senator **STEVENS**. When you are increasing variable housing allowances 32 percent and we are forced to cut the overall budget to the extent we are to keep up with the budgetary limitations imposed on this committee, what it really means is deeper cuts in other areas, in tanks, in guns, in planes, and in everything else.

Dr. **KORB**. Again, 32 percent over a 4- or 5-year period.

Senator **STEVENS**. It is not a 4- or 5-year period. In 1 year you have increased it 32 percent.

Dr. **KORB**. I said that is to make up for the higher absorption we have had over the last couple of years.

Senator **STEVENS**. It makes up for the fact that Congress said you are increasing those allowances too fast already. You come back to us and say make everything we cut since 1981 in terms of your approach to the law we passed.

END STRENGTH CONCEPT

I really think you are making it extremely difficult for this committee to sell the overall budget. Let me turn to end strength increases for a few minutes.

I know you have a time constraint.

We thought we had agreed to an end-strength limitation in Europe. We agreed to 315,600. Then we agreed to 2,600 additional spaces for GLCM. We did not oppose a further increase of 4,400 if certain requirements were met.

Now we find that DOD wants to increase that by another 3,800. Why, after we have taken care of the new initiatives in Europe, should we budget for troops in excess of the level that we funded last year?

Dr. Korb. The ceiling for 1983 was roughly 315,000. The Congress told us in passing that bill that we could request a waiver for anything that the President determined necessary for national security.

We were selective in applying that waiver. We applied it only for GLCM.

Last year Congress told us for 1984 we could take that ceiling to 320,000 and again if we get the waiver for GLCM, that would take it up to 322,600.

Congress also told us that we needed to provide the Congress with a report that said any further increases would be conditioned on what our allies did.

The Secretary is in the process of doing that. The law said that they could not decrease their numbers because I think the Congress was quite rightly concerned that ours were making up somehow for the allies.

That certification has already been forwarded to me that there are no planned decreases on the part of any of our allies. The Secretary will forward that report to the Congress.

So, at the end of 1984, we will get to the congressionally approved level of 322,000. Actually, we will be at about 322,400 instead of 322,600 which is allowed us.

What we are telling you now is based upon what we know, and we provided extensive justification for it. We would like to increase that to 326,400 at the end of 1985, including 4,650 for GLCM.

In other words, what we are talking about is half of the increases for more GLCM sites which we expect to be deployed again by the end of fiscal 1985 which is quite far away, well over 18 or 20 months from now.

NATO INCREASES IN PARTICIPATION

Senator Stevens. I have just read a recent statement of the European allies concerning our presence. They indicate that they are providing 90 percent of the troops and more than half of the air force. They say they are increasing their participation.

I haven't seen any of that come from the Department of Defense. But if all that is true, then there is no reason for us to increase at this rapid rate.

We think, at least this Senator believes, that we reached an agreement that we would not increase end strength except for national emergencies.

The Army is putting together a whole new division and not increasing their end strength.

The Air Force moved GLCM into Europe. We agreed to 2,600 spaces last year.

Dr. Korb. Again, I don't see how, if you are adding more GLCM sites, you can absorb that within the other things that you are doing.

The Army is changing the way in which it mans some of its divisions. It is cutting its current division structure which is something like 17,000 down to 10,000.

Senator Stevens. Yes, adding another division without increasing their end strength.

Dr. **Korb**. That is correct. If you take a look at what we are asking for in the increase, which has been scrubbed very thoroughly, by the end of 1985 we are 8,600 below the level before we began reviewing this particular process.

If you had looked at General Roger's earlier plan, he would have told you he planned at the end of 1985 to have close to 335,000 in there.

When we reviewed this, we cut it down to about 326,000 and that is the proposal.

Senator **Stevens**. I have reviewed that plan. As a matter of fact, at the time General Rogers was doing that, I believe he included forces afloat. We have excluded forces afloat from this concept.

So, you are talking about troops on the ground now assigned permanently in Europe.

I think, if anything, we have stretched this limitation and stretched it and stretched it each year. I don't think the American public realizes how rapidly we are increasing costs in Europe.

What does it cost to keep troops in Europe for this year?

The last time they gave the information to this committee, John Stennis was chairman. The cost factor was alarming. I estimate about $165 billion a year out of this budget is really assigned to the defense of Europe, to our NATO support.

Dr. **Korb**. You are not referring just to troop cost?

Senator **Stevens**. This includes overall cost, troops and assignment of equipment, new equipment and new procurement. Roughly $165 billion out of this budget will go to Europe.

I read constantly in the European papers how we are leaving them, we are not doing our part. I tell you it is blowing on deaf ears.

I will dust off Mansfield's resolution pretty soon because I just don't think this should happen. I think this is the place where our budget is getting out of hand.

MANPOWER ACCOUNT

If we have to cut back on ships and airplanes and cut back on tanks and missiles, it is going to be because of this account, the manpower account. Is it over 60 percent of your budget now?

Dr. **Korb**. No, sir.

Senator **Stevens**. What is it?

Dr. **Korb**. It is closer to 40 percent.

Senator **Stevens**. That is your testimony. I am sorry, but we don't view it that way in terms of the way you are putting other costs into this.

Dr. **Korb**. I am putting active duty, civilian, reserve pay, family housing, and military retired pay. It is about 42 or 43 percent because, remember, the fastest growing account in the overall defense budget is procurement.

If you take a look compared to 1980, you will see that in real terms the procurement budget is double.

Senator **Stevens**. You are talking about budget authority again?

Dr. **Korb**. Even on an outlay basis, it is below 50 percent.

BUDGET REDUCTIONS

Senator **Stevens**. Outlays are 50 percent. I would recommend that 50 percent of the budget reductions are applied to this sector. We have not been able to make many reductions in this sector of the budget. Most of the reductions have been in other sectors of the budget.

Those of us who are in favor of modernization find ourselves in an unfortunate situation.

Do you stop building battleships, submarines, or tanks?

Again, I tell you that you have the luxury in your part of the budget of not having to absorb many cuts. Every year you come back and fold them back in again.

Dr. **Korb**. No, sir. Again, I would disagree with you. Last year we asked for a 40,000 increase in end strength, Active duty end strength. We got roughtly 10,000. Our active duty end-strength increase this year is very modest. It is 30,000.

I understand the point that you are making, but I would like to make this point.

The manpower account follows the procurement account. The people we are asking for, military and civilian, this year are to man weapon systems that the Congress authorized in 1980, 1981, and 1982.

If, as I mentioned at the end of my testimony, you want to cut manpower now, you have to cut back the weapons systems now so that a couple of years from now we don't have to come in and ask you for the extra people. Manpower follows along with the other accounts.

I will also say that in a lot of particular areas of the manpower budget we have received our fair share of the reductions; in my view, an unbalanced one because they are out of phase.

When our 1981 and 1982 budgets were basically approved by the Congress, we didn't have any manpower increases in them because we were just beginning to really add the weapon systems.

When we began to come back and ask for manpower to man the weapon systems that were coming out, we had a lot of problems, a lot of economic problems, and the Congress was looking for ways to cut the budget.

In my view, if you want to deal with the manpower situation, you have to deal with it on a long-term basis. The way to do it is not to take the poeple in the force now and cut their pay and benefits.

INCREASES IN PERSONNEL

Senator **Stevens**. We have never cut pay and benefits since I have been chairman or since I have been on this committee. That is an unfair thing for you to say.

We have increased them every year. The question is, At what rate of increase? The Air Force has increased its manpower in Europe by 20 percent since 1980. That is not a decrease of troops. It is a question of how much the rate of increase is.

Again, it comes out in the European press that we have suggested cutting troops. It falls on deaf ears. Maybe Dr. Kissinger has a point. Maybe we ought to have someone other than General Rogers as Supreme Commander.

General Rogers says by 1989 end strength is going to be 104,500 for the Air Force, an increase of 15,000. That is what we are told.

If that is the case, he is not listening to us. I don't know who is making policy for the number of troops we have. Is he still part of the U.S. Armed Forces over there? He is Supreme Commander of NATO, I thought.

Dr. KORB. He is. He is also a U.S. commander. He wears two hats.

Senator STEVENS. He does, but his primary role is Supreme Commander, is it not?

Dr. KORB. Again, he is like many of our military commanders, he has a number of repsonsibilities, but I would say yes, the Supreme Allied Commander is a more preeminent post.

General Rogers makes the recommendations; the Joint Chiefs of Staff analyzes them. We analyze them. We make recommendations to the Secretary. He makes recommendations to the Congress, and we discuss them.

I agree with you 100 percent, our troops in Europe are going up. what we have done in fact is slow down the growth.

PERSONNEL INCREASES IN NATO

Senator STEVENS. I don't think we have slowed down at all. We thought we had an agreement that we would not go beyond 315,600 without some real national emergency.

We viewed GLCM as an emergency. We allowed 4,400 in addition to that. We exempted the Navy from the ceiling, except those permanently assigned to shore.

Dr. KORB. That is correct.

Senator STEVENS. So, we actually exempted several thousand.

Dr. KORB. That is correct.

PERSONNEL END STRENGTHS IN EUROPE

Senator STEVENS. Again, people say we are suggesting reducing the strength of our force in Europe. We are not.

We just think it is time that the public understood how rampant this growth is. That it is permanent. You don't ever get one out. I don't think we have ever been able to take one down. Even during Vietnam I don't think we withdrew our forces, although at the time of the Falklands the British walked off with their people.

No one seems to view our participation in the same light. Some people seem to think every one you ever add is there permanently.

Again, you are doing the rest of the Department a disservice by not maintaining your control over end strength in Europe.

Dr. KORB. Again, there are two things to be said about that.

First, if we don't have them in Europe and we don't take them completely out of the force structure, there are no real savings.

If we take them out of Europe and take them out of the force structure——

Senator STEVENS. Wait a minute. This has to do with end strength increases. We are not taking anything out of the force structure. They are not there yet.

Dr. **Korb**. I understand that. What I am saying is if you think on D-Day they will have to be there, we will have to keep them on the rolls back here in this country. In fact, we don't save any money doing it that way.

If we take them out of Europe and we demobilize, yes, then we will save money. But in fact you could have an extra increase if you had to billet them back here and you had to build facilities for them to be here.

So, if it is a policy question in terms of getting allies to do enough, that is one thing. If it is a monetary question, you have to use other criteria.

Senator **Stevens**. Dr. Korb, we are borrowing the money to send these people to Europe. We have a deficit of almost $200 billion. I have not seen any indication at all from the Department of Defense in the manpower area that they understand that these people are going to Europe on borrowed money.

Not many of our taxpayers go to Europe on borrowed money and live there permanently. That is what this is.

You want more people to stay in Europe on borowed money and live there permanently. I tell you it is wrong. I really think it is starting to catch on in Congress that something is really awry with this concept that we have to continually increase our troop presence in Europe.

Dr. **Korb**. Senator, our active duty end strength is very small compared to where we were before Vietnam or any time during the 1970's, very, very small. I will say to you even if we did have those troops in Europe, if we still want to defend Europe and execute all our plans, we have to keep them in the force structure someplace else, and we have to be able to get them there.

So, there would not be any savings. I think in terms of borrowed money, you could apply that to any part of our national defense structure.

Senator **Stevens**. It does apply to other parts of the defense structure. It is one thing to borrow money to replace a B-52 that is so old that it has to be replaced. It is another thing to plan an annual end strength increase that appears to be more or less for convenience.

Again we were under the impression that we had reached a limitation which would not be breached except in a national emergency. The President would personally certify that an increase was necessary.

Dr. **Korb**. Again, sir, 2 years ago it was 315,000. Last year the Congress authorized us to go to 320,000 plus GLCM. So, in fact, the Congress agreed with us last year, after examining our baudget, that we could add an extra 5,000.

We are estimating that we would need the same increase again over the next fiscal year.

Senator **Stevens**. You could go to 320,000, if you met the requirements that were listed in the Armed Services report.

Dr. **Korb**. That is correct.

Senator **Stevens**. And we did not oppose that last year.

Dr. **Korb**. I have every confidence that we will meet these requirements.

Senator **Stevens**. I just think it is an inexorable march to station more and more people in Europe. Somehow or other that concept has to share the budgetary problems of this country.

I just don't understand again how we can afford the luxury of sending people over there on borrowed money. I understand the GLCM base at Greenham Common, when it is fully operational, will have 1,671 people at the end of fiscal year 1988. Fewer than one-fourth of those will be operating and maintaining the missiles. Three-fourths of them will be for the administrative, support, and security functions.

INCREASES IN SUPPORT FUNCTION PERSONNEL

Why do we increase the total numbers in Europe for support functions? I thought we had support functions there already.

Dr. **Korb**. Again, we have some support functions. I think if you take a close look at it, you will find out that you need extra security, for example, at a GLCM site like Greenham Common that you would not ordinarily need at a base.

If you take a look at some of those things, for example, when you deploy the missiles, you go on your exercises, you need people to drive the trucks and other mobile equipment.

Senator **Stevens**. The other day a reporter asked me how we keep up with the bill, knowing the number of staff we have.

I really don't know how we keep up with it. We just try to probe on certain things. One of them is this GLCM. There will be 63 people in the Comptroller's office at that one Greenham Common location for GLCM at the end of fiscal year 1988.

With computers, can't we put the Comptroller in some central place over there in Europe?

We will have 149 people in resources and resource planning for Greenham Common at the end of fiscal year 1988. I just can't believe that anyone has really examined this with a fine-tooth comb.

In security functions we will have 485 people at the end of fiscal year 1988, plus there is also a combat support group. What for?

That is 189. You just pick out one place and look to see what is happening to GLCM and it is a feather pillow.

We agreed to an end strength limitation. We said we would make an exception for GLCM. All of a sudden everything sneaks in under GLCM.

So that we have 4,400 in Europe for GLCM. This is 2,050 more people in fiscal year 1985 then was requested in the Presidential Waiver last year. Somehow or other you have a feather pillow which is sending more borrowed dollars to Europe.

I tell you, I don't think you are being fair with us, those of us who agreed to compromise on the end strength limitation in Europe in 1982.

Dr. **Korb**. No, sir, the 1983 budget.

Senator **Stevens**. Calendar year 1982 for the 1983 budget.

MILITARY END STRENGTH IN EUROPE FOR 5-YEAR PLAN

Using the plan in 1982, what would have been the military end strength in Europe for the 5-year plan?

What would it have been if we had not entered into that agreement at the time we were told in 1982 what the end strength would be over the coming year?

In your portion of the budget, pay plus the end-strength assignment to Europe, and the increase in variable housing allowances, are unacceptable this year.

I understand that you are considering cutting civilian overseas housing allowances; is that right?

Dr. **Korb**. No, sir. What I think you are referring to is the fact—again, "considering" is a broad word—there have been some complaints on the part of a number of people, including Congressmen, that there is some sort of double counting of civilian benefits overseas.

Because of that, my office sent a notice to the field that said: These are the complaints. Let us hear your reaction to it.

That is essentially what we did.

RECOMMENDATIONS FOR CIVILIAN ALLOWANCES CUTS

Senator **Stevens**. The Army Times indicates you plan to cut civilian allowances by 16 percent while increasing military allowances.

Dr. **Korb**. No, sir. I am not responsible for what is written in the newspaper. I can tell you what is the fact.

We were under pressure from a number of groups because of the peculiar circumstances of civilians overseas, so we sent it out to the people for their reaction.

Basically, people have told us, as we correctly assumed, that if we did this, we would have trouble getting and keeping good civilians overseas.

I think we can turn around and present that evidence to those who claim that civilians overseas are getting double benefits or benefits to which they are not entitled.

Senator **Stevens**. Again, it is one of these little points, but last year you told me that one of the reasons we should keep increasing selective reenlistment bonuses was that, for instance, the Navy was justified in paying bonuses to boiler technicians because the overall boiler technician manning was 80 percent.

This year boiler technician manning is 105 percent and you are requesting bonuses for them again.

Dr. **Korb**. Let me say a couple of things about it.

If you take a look at that, I think you might want to get into this more deeply, and we can provide those for the record.

The aggregate number may be OK, but you might have shortages in people at particular pay grades.

Senator **Stevens**. Do you know how difficult it is to get a defense bill through this committee that reflects the administration's priorities?

Dr. **Korb**. I appreciate the difficulty.

OPPOSITION TO DEFENSE INCREASES

Senator **Stevens**. We are facing growing opposition to defense increases. You give me a budget that has these increases in your sector and I have got to try to meet them.

Incidentally, the people who vote against defense increases will vote for the pay raise. They will vote for the incentives and the other things. Those are people-sensitive.

You know, I lose on any attempt to limit bonuses. I lose on any attempt to limit VHA. But we must control personnel costs or we will lose elsewhere in the defense budget.

You are going to end up getting everything you want and you are nearly 50 percent of the budget. We are going to reduce this budget from the President's original budget level by more than $20 billion. The reductions will fall on the other 50 percent.

It is almost the same as a $20 billion cut in procurement and in other areas of the Department. You don't help me at all, Dr. Korb.

Dr. KORB. Let me make a couple points about that.

We are talking about a cut, according to the package that you and the other members of the Republican leadership agreed to with the President, of $6 billion in outlays, $14 billion in authority.

Senator STEVENS. The President cut it more than $6 billion before it even got to us.

Dr. KORB. That is correct. Those are outlays.

Senator STEVENS. So, it is $12 and $20 billion. Will it come from your area?

Dr. KORB. We have not submitted our proposal yet. I will state to you that when our proposal is submitted, we will present a balanced program. If we are going to cut weapon systems, we will cut the people that go along with them.

Senator STEVENS. I invite you to do that.

Again, I tell you your part of the budget probably will win in the committee, but we will have difficulty getting increases in procurement, modernization, weapons for space and chemical warfare weapons.

Dr. KORB. Senator, I would disagree. If you take a look and go back to fiscal 1980, the fastest growing part of the budget is procurement. It is doubled.

VHA BUDGET

Senator STEVENS. You had VHA starting in 1981, and in 1985 it will be up about 200 percent. You can't say that that is so.

Dr. KORB. Again, I would disagree with you.

Take a look at fiscal 1984. We end up with total manpower cost, including everything, direct and indirect of $104.6 billion.

We are requesting this year in 1985, before we did the study on VHA, $113.5 billion. That is an increase of $9 billion, a little less than 9 percent in a budget that as originally submitted to the Congress was up 13 percent in real terms.

That is not 9 percent in real terms. That is about 4 or 5 percent. So, I don't think that the overall manpower budget has gone up that much.

Our active duty strength, for example, if we got everything we asked for from the Congress, would be about 2,166,000.

In 1964 before we went into Vietnam we had an active force of about 2.7 million people. The Selective Reserve was roughly about the same.

I don't apologize for the budget. Again, if you take a look at where the reductions were made, last year Congress made 853 changes in our budget, many of them in what I would call readiness-related areas having to do with things like military construction which supports housing.

That has remained flat over the last couple of years. I am including in our manpower cost a very dramatic increase in housing because we have been basically flat over the last couple of years.

Our proposal this year was less in the manpower than the rest, about half as much as the rest of the budget that was proposed originally.

I can tell you whatever program we do present to you will be a balanced one.

HOUSING ALLOWANCES

Senator STEVENS. You think housing allowances have been relatively flat over the last 3 years?

Dr. KORB. No, sir, I said the total manpower budget. We can talk about different components.

Senator STEVENS. If we had given you your end strength, how much money would you be spending now?

Almost every year we have given you considerably less funding for end strength than you requested.

Dr. KORB. Last year they lowered it significantly. In 1981 and 1982 and 1983, we got basically what we asked for.

PAY AND ALLOWANCES FOR OFFICERS

Senator STEVENS. My staff tells me in 1980 the average pay and allowances for officers was approximatley $27,000. In 1984 it is over $39,000.

Do you think that is a slow increase?

Dr. KORB. Again, if we go back and take a look at the total manpower costs in fiscal year 1980, they were $80 billion. Five years later we are talking about $113 billion, and that is an increase of $33 billion over 5 years; which is an average increase of about $6 billion a year or about 6 percent in nominal dollars.

So, in real terms it much less than that.

MILITARY PERSONNEL COSTS

Senator STEVENS. Why don't you give us your figures for the record. What are the average costs of military personnel in 1980, 1981, 1982, 1983, and 1984, and projected for 1985?

Let us look at 6 years in the record and see who is right. We are watching this. Your end strength limitations have not gone up as you projected, but your average costs have gone up.

Dr. KORB. 1980 is an unfair year to take because it was the fiscal year 1981 budget that Congress instituted——

Senator STEVENS. I asked you for all six.

Dr. KORB. All right. If you go back to 1982, we were $94 billion by 1982.

[The information follows:]

AVERAGE COST OF MILITARY PERSONNEL

Question. Provided the average cost of active duty military personnel by officer, enlisted, and the combination of the two, for the period Fiscal Year 1980–1985.

Answer. The requested data are as follows:

AVERAGE COST OF ACTIVE DUTY MILITARY PERSONNEL

[In dollars]

	Officer	Enlisted	Combined
1980	27,701	12,046	14,159
1981	31,980	13,875	16,341
1982	37,363	16,001	18,935
1983	38,749	16,715	19,781
1984	39,460	17,241	20,386
1985 (without retired pay)	40,245	17,657	20,881
1985 (without retired pay; with 5.5 percent P/R)	41,670	18,278	21,617
1985 (with retired pay accrual)	54,158	23,421	27,809
1985 (with retired pay; with 5.5 percent P/R)	56,157	24,280	28,931

The foregoing data include all costs in the active military personnel appropriations and the tax advantage because the allowances are not subject to taxes, except those costs for:

Pay and allowances of cadets and midshipmen.

Permanent change of station travel.

Death gratuities, apprehension of deserters, unemployment compensation for former military personnel, and survivor's benefits.

The data are on a direct basis; i.e., they exclude reimbursable dollars and strengths.

Beginning in fiscal year 1985, the Defense budget reflects amounts to cover the accruing retirement liability for personnel on the rolls as of October 1, 1984. A 5.5 percent military personnel pay raise is proposed for January 1, 1985. The table displays four sets of costs for fiscal year 1985: two with and two without retired pay accrual amounts.

SHORTAGE OF AVIATORS

Senator **STEVENS**. You are planning to pay aviation officers continuation bonuses in 1985.

Is there still a shortage of aviators?

I understand you have more aviators than you do planes right now.

Dr. **KORB**. As you recall, last year, Senator, the Authorization Committee took the position that you did, the Appropriations Committee, after listening to the Secretary of the Navy, put the money back in.

So, in fact, you were in a sense supporting the Navy's position.

Senator **STEVENS**. The payment was allowed ony where shortages exist. Are the Marines using it?

Dr. **KORB**. I think they may be planning to use it again in 1985. I think what you are dealing with is a definition of what exactly is the shortage.

If you look at aggregate numbers, you have enough people. If you look at particular pay grades, a particular system, a particular weapon system——

Senator **STEVENS**. I tell you, as I look at this portion of the budget, I don't look forward to the markups. I know that in some we are not going to be able to cut it.

Again, I hope that in your resubmittal you are fair with the committees and Congress in terms of taking your share of the reductions. I thought your share was more than 50 percent.

Dr. KORB. No, sir. If you figure our outlays for 1985 at $260 billion, you take $113 billion, that is about 44 percent.

Again, I will say to you one of the reasons is that manpower is the slowest growing portion of the budget.

NEED FOR SELECTIVE REENLISTMENT BONUSES

Senator STEVENS. Do you still need selective reenlistment bonuses, too?

Dr. KORB. I think we do. I think our retention rate, which has gone up from something like 55 percent to close to 70 percent over the last couple of years, is a good indication that the Selective Reenlistment Bonuses work well.

I agree with you that we must scrub them. We constantly scrub them to make sure they only apply in those areas in which we have significant need.

Senator STEVENS. You know, I was a pilot in World War II. I believe in pilots' bonuses, in bonuses for people who take exceptional training, exceptional risks.

I was alarmed when my staff told me that we had 24,000 pilots in the Air Force and 7,000 planes, that 20 percent of the people who are receiving flight pay now fly fewer than 5 hours per month.

In my day you had to fly your time to get your flight pay.

Dr. KORB. In my days, too, Senator.

Senator STEVENS. There are 13,000 Air Force pilots and navigators who practically do not fly, but get paid flight pay.

Again, it is a little pimple on this budget, but it is symbolic. There is no way to stop anything over in the Department once it gets started.

GROWTH IN VARIABLE HOUSING ALLOWANCE

I think the variable housing allowance shows that more than anything else. I believe variable housing allowance have grown faster than the food stamp budget.

Dr. KORB. Again, I would say it is a combination of the growth of housing costs as well as what has in fact happened to BAQ over the last couple of years.

Senator STEVENS. Housing costs have not grown 92 percent. According to Bureau of Labor Statistics they have grown 47 percent in that period of time, but military housing allowances have increased 92 percent.

Dr. KORB. The cost increases measured in our surveys are not significantly out of line with figures published by the Bureau of Labor statistics.

DEFENSE AUDIT SERVICE STUDY

Senator STEVENS. The Defense Audit Service has an audit that indicates that 70 percent of those surveyed who received VHA overstated their utility bills, 32 percent overstated their rent, 35 percent overstated their mortgages, and 16 percent overstated their mortgage by more than $100 a month.

What have you done about the Defense Audit Service report, dated November 3, 1982?

You have asked for another increase of 32 percent on top of this abuse.

Dr. **Korb**. The report we sent to Congress recommends that we tie the VHA to the housing component of the Consumer Price Index so that increases in VHA will not be based on expenses reported by military personnel. We were concerned, like you were, about that. That is why we have taken that step.

Senator **Stevens**. We are supposed to be on the same side. That is what bothers me. Every time I come to this program I just wonder how we can be on the same side.

Dr. **Korb**. I think both you and I are on the same side, and we want to do it in a balanced way. We need to treat the people we have fairly.

I think that if we build weapon systems, we need to build runways, we need to man them with people. We have to scrub the requirement for people as well as we do the requirement weapon systems.

If we cannot afford the people, please don't give us the weapon systems because if we can't man them, then we are not better off and vice versa.

Senator **Stevens**. As we bring on new airplanes, we are supposed to be retiring older ones. As we bring on new tanks, we ought to be retiring older ones.

They are sold to us on the basis they are more cost effective. They have more high technology, require less maintenance and are more effective in the field. Every year we get a request for more and more people because we have more and more modernization.

Dr. **Korb**. Again, Senator, I would say that the request for 30,000 people in a year when we are dealing with a procurement budget that has doubled is a relatively modest request; 30,000 active duty people and 7,000 civilians, in my view, is a very modest request and goes along with the buildup that has occurred in the last couple of years.

Senator **Stevens**. We will be going over it.

SUBMITTED QUESTIONS

I though there might be other people coming this morning. They may have questions to submit. If so, we will give them to you in the normal course.

We will look forward to your reshuffling of the budget. I think your revision should await the action of Congress on the budget process to see where our targets are before you indicate where the cuts should be.

I do hope when it gets here it provides a relative balance between procurement cuts and manpower cuts.

Dr. **Korb**. I can assure you that it will.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

ADDITIONAL COMMITTEE QUESTIONS

END-STRENGTH LIMITATIONS

QUESTION: The Secretary's Annual Report says that if end-strength is constrained readiness will ultimately suffer. Did readiness suffer as a result of end-strength limitations last year?

ANSWER: Service active end-strengths are intended to support force modernization and expansion at a high level of peacetime manning. This entails minimizing the number of unfilled programmed manpower structure billets. As shown below, constrained FY 1984 end-strengths caused a slight increase in overall manning shortages which occurred solely in the Navy. Comparable figures for FY 1985 are also shown, which suggests that strength caps in FY 1985 are likely to result in lower levels of staffing than are desired. Depending upon individual service staffing policies and inventory distribution priorities, the result of such actions could be an undesirable increase in unfilled structure in the operating forces, with a direct impact on readiness:

Structure Not Programmed for Staffing (in 000's)

	FY 83	FY 84	FY 83-84 Change	FY 85
Army	87.8	85.4	-2.4	86.2
Navy	70.5	98.5	+28.0	98.5
Air Force	38.9	38.9	NC	36.0
MC	15.6	13.9	-1.7	14.7
DoD	212.8	236.7	+23.9	235.4

NAVY MANPOWER

QUESTION: The Navy's request for increased end strength is 10,500. Based on the ships and squadrons entering the fleet in fiscal year 1985, the requirement would be about 3,500.

Could the rest of the Navy's increased request for manpower be deferred?

ANSWER: No. Deferral of any portion of Navy's requested 10,500 end strength increase will adversely impact our fleet forces (ships and squadrons). Congressional reduction in previous years has placed Navy in a difficult position relative to maintaining an optimum balance between fleet and fleet support manpower. Fleet support is at the minimum level required to maintain desired readiness. In addition, a significant portion of the non-fleet growth is for medical manpower to correct long standing shortfalls in wartime casualty care.

MANPOWER INCREASES

QUESTION: In your statement you said that weapons systems should be cut if manpower increases are not granted. Will you suggest which weapons system should be cut if your requested manpower increases are not authorized?

ANSWER: The statement does not imply that weapons systems should be cut. On the contrary, it merely points out that the manpower increases we are requesting this year are vital to operate and maintain the weapon systems that Congress has authorized during the past several years. Failure to provide these increases may save some funds in the short run, but will cause manpower readiness problems in the longer term.

EUROPEAN TROOP STRENGTH

QUESTION: What are the costs associated with increasing U.S. troops in Europe from 318,200 to 322,600? What are the costs associated with increasing U.S. troops in Europe as planned in FY 1985?

ANSWER: The cost associated with increasing U.S. troops in Europe by 4,400 is about $10.2 million. The costs associated with increasing U.S. troops as planned in FY 1985 is about $9.2 million. These amounts relate to the difference in PCS costs between an overseas move and a CONUS to CONUS move, housing allowances overseas, temporary lodging allowances, and family separation allowances. Operation and maintenance support costs also vary, but we believe the variance is small and budget data to measure this difference are not available.

QUESTION: What have our allies done to increase their active duty forces since 1980?

ANSWER: Our NATO allies have increased their active duty forces by about 100,000 persons since 1980. The bulk of this increase was in the Turkish armed forces. Most allied nations have kept the size of their military establishment relatively stable, concentrating on essential modernization and on improving readiness and sustainability of existing forces.

NATO COMMITMENT

QUESTION: Why should we continue to underwrite the cost of European defense when they are unwilling to meet their fair share of the costs?

ANSWER: The defense of Europe is integral to the defense of the United States. We, along with our NATO allies, are committed to the concept of mutual defense since the loss of Europe would result in the disintegration of the free world as we know it today. The allies are contributing to that mutual defense. Though there is no single measure that quantifies a fair share of defense, the Department of Defense concludes that, taken as a whole, the NATO allies appear to be carrying about their fair share of the overall burden.

QUESTION: In a recent article former Secretary of State Henry Kissinger says, "By 1990 Europe should assume the major responsibility for conventional ground defense." Are our allies moving in that direction?

ANSWER: There are no plans to decrease the role of US ground forces in conventional defense of the territory of the Alliance. The US is committed to reinforcing Europe to attain 10 divisions and the associated air support by D + 10 in the event of hostilities. We continue to work with our allies on improving the collective defense effort, as evidenced by our efforts to increase emphasis on the use of emerging technologies, but these efforts must be viewed as a supplement to ground forces as opposed to a replacement thereof.

QUESTION: How does increasing US troops in Europe encourage our allies to increase their conventional ground defense?
ANSWER: The US has made some modest increases in troops stationed in Europe in order to modernize the force there and make substantial improvements in their conventional defense capability. The European allies stationing troops in Germany have also made some slight increases there in recognition of the increased threat to Central Europe. As the leader of this Alliance, the US must lead by example. We fully expect the European allies to continue to improve their conventional defensive capability.

NATO BURDENSHARING

QUESTION: What are the costs in the 1985 budget associated with the US commitment to NATO?
ANSWER: This is an exceedingly complex matter for many reasons, including the fact that most of our NATO-oriented forces would be available to undertake other missions if need be depending on the contingency, just as some of our other forces might, in case of need, be used in a NATO conflict. The question of US costs for NATO is the subject of a Report to Congress on United States Expenditures in Support of NATO, which was required by provisions of Section 1107, PL 98-94, The Department of Defense Authorization Act, 1984. This report will be submitted this spring.

MILITARY PAY RAISE

QUESTION: Last week we received testimony from a public witness who stated that the military will need a 10% pay raise to keep pace with the private sector.
Do you think the military need a 10% pay raise?
ANSWER: Military pay comparability was achieved with the average 14.3 percent pay raise in October 1981. Because of caps on the October 1982 and January 1984 pay raises, military pay raises now lag approximately 5.5 percent behind private sector pay raises since that time. We estimate that a military pay raise of about 10.5 percent would be required to restore comparability in FY 1985. Though we are committed to the principle of comparability, however, we believe that, given the need to restrain government spending in order to reduce the budget deficit, the 5.5 percent pay raise we are requesting in FY 1985 is fair to military personnel and will enable us to remain competitive with the private sector for manpower.

QUESTION: Since 1967 military pay raises have been tied to General Schedule pay raises. However, in three of the past four years and in 1985, military pay raises have been higher than those of federal civilians. It is clear that there is no longer a link to civilian raises.

On what are you basing your request for the 1985 military pay raise?

ANSWER: We are committed to the principle of pay comparability for our men and women in uniform. Pay comparability was achieved in October 1981, but the two military pay raises since that time have been capped so that military pay now lags behind private sector pay. In order to remain competitive and to be fair to military personnel, we are requesting a 5.5 percent military pay raise in FY85, a raise that matches private sector wage growth plus provides military personnel a small incremental increase in recognition of the pay raise sacrifice they have made the past two years.

QUESTION: Since 1980, military pay has increased by 38%. In your statement you mention that the private sector salary increase for 1985 is 4.7%. Why then are you requesting a military pay raise of 5.5%?

ANSWER: The large increase in military pay since 1980 includes catch up raises in 1980 and 1981 which were required because military pay had fallen far behind private sector pay and had resulted in severe recruiting and retention problems. Measured from 1981, when military pay comparability was restored, military pay again lags behind private sector pay as a result of pay raise caps in October 1982 and January 1984. Because of this lag, we believe that the military pay raise in FY 1985 should more than match private sector wage growth if we are going to remain competitive for manpower. Therefore, we are requesting a military pay raise of 5.5 percent versus the estimated 4.7 percent increase in private sector pay.

QUESTION: When you considered the pay raise requirement in the 1985 budget, did you estimate the effect of longevity increases and promotions on military Pay?

ANSWER: No. The pay raise is applied to the rates of basic pay, basic allowance for quarters (BAQ), and basic allowance for subsistence (BAS). Just as with the federal civilian pay raise, factors based upon individual circumstances, such as longevity increases and promotions, are not considered in determining the amount of the military pay raise.

PAY COMPARABILITY

QUESTION: When comparing military pay to civilian pay the Defense Department uses only Regular Military Compensation (RMC). This does not include bonuses, incentive pay and many allowances. The excluded pays comprise 11% of the military payroll, an average of $2,000 per service member.

How can you assess whether a pay raise is necessary if the monetary incentives in addition to RMC are not included in the comparison?

ANSWER: Since 1967, the law has specified that it is the military pay components of basic pay, basic allowance for quarters (BAQ), and basic allowance for subsistence (BAS) that should be increased to keep pace with civilian wage growth. It has long been recognized and accepted that these pay elements comprise the military equivalent of a civilian salary, and that the other components of the military compensation system, such as bonuses, special and incentive pays, and other allowances, are aimed at specific situations unique to the military. Therefore, we increase the military equivalent of a civilian salary -- basic pay, BAQ, and BAS -- based on civilian wage growth and use other criteria to adjust the other components of the compensation system.

QUESTION: When comparing military pay to civilian pay the Defense Department uses only Regular Military Compensation (RMC). This does not include bonuses, incentive pay and many allowances. The excluded pays comprise 11% of the military payroll, an average of $2,000 per service member.

How many military members receive pay in addition to RMC?

ANSWER: We do not have data readily available on the number of military members who receive pay in addition to RMC. We do have data on the number of payments that are made in the various pay categories, but since some members receive more than one additional pay, a simple addition of the payments would overstate the number of members receiving such pay.

CIVILIAN AND MILITARY COMPENSATION COMPARISONS

QUESTION: The average age of an officer in the military is 33, that of an enlisted person is 25, while a DoD civilian is 41. Does the greater average age of the civilian explain partially why average civilian salaries are higher than military RMC?

ANSWER: While greater average age may partially explain why average civilian salaries are higher than military RMC, there are factors which we believe play a more significant role, namely greater length of service and a different mix of skills in the civilian work force.

QUESTION: The pay raise request for civilians is only 3.5% compared to 5.5% for military. The total cost of compensation for DoD civilians averages $25,780. This includes employer contributions for retirement, health benefits, and social security/medicare.

What is the average total cost of active duty military compensation and benefits?

ANSWER: The total cost of active duty military compensation and benefits in FY 1985 is $20,881, excluding retirement accrual for personnel currently on active duty. This figure includes all officer and enlisted pay and allowances, special and incentive pays, employer contribution to social security, and the federal tax advantage related to tax free allowances. The cost for military retirement accrual in FY 1985 is $6,928. If retirement accrual is included therefore, the total cost of active duty military compensation and benefits is $27,809. This figure, however, cannot be compared directly to the civilian figure of $25,780 since budgeting for retirement and health care costs is done on a different basis. For example, military retirement is computed on an accrual basis such that it fully funds future retirement benefits whereas the employer contribution for civilian retirement reflects only a fraction of the cost to fully fund the benefit. Therefore, the large difference in the cost of retirement in the figures above does not reflect the actual difference in the cost of the benefit but rather results from the use of different computation methods. As another example, the budget for military health care includes funding for the cost of requirements unrelated to military compensation, such as maintaining a wartime base, and thus the entire cost cannot be attributable as compensation. For this reason, military health care costs are not included in the above figures. On the other hand, the employer cost for health benefits is included in the civilian figure.

VARIABLE HOUSING ALLOWANCE

QUESTION: In 1983, the VHA program was underfunded due to the increases resulting from an updated survey. Is the fiscal year 1985 request for VHA fully funded? If not, what do you anticipate will be the additional costs during execution?

ANSWER: As a result of restraints placed on the VHA program the past two years, military members are now absorbing housing costs equal to 29 percent of BAQ, considerably higher than the 15 percent specified under permanent law. We have included funding in the FY 1985 budget which will enable us to restore the BAQ absorption to 15 percent, using the survey of housing expenses conducted in the spring of 1983. It does not reflect, therefore, the results of the survey which we are currently conducting. However we will be forwarding legislation to Congress to restructure the VHA program based on the recommendations of a Joint Service study. If enacted, the funding requirement for VHA in FY85 will be approximately $300 million less than that contained in our current request.

AVIATION OFFICER CONTINUATION PAY

QUESTION: Last year the Appropriations Act restored authority to pay AOCP to all aviation specialties in the Navy and Marine Corps where shortages exist. The Marines did not budget for AOCP but it appears the Navy is planning on paying all its aviators.

Is the Navy planning to pay Aviation Officer Continuation Pay in 1985 to all aviators regardless of whether shortages exist?

ANSWER: The Department of the Navy is continuously reviewing the AOCP program and, as it achieves the desired success rate, plans are to target the bonus to those aviation skills where shortages exist or are projected to exist. Accordingly, most land-based communities will be denied the bonus, reducing by approximately one-third the number of aviators who will be eligible to participate in the FY 85 program. Inventory requirements will be reviewed annually to target the bonus as necessary.

QUESTION: Are the Marines planning to pay AOCP even though it was not budgeted?

ANSWER: No, the Marines do not plan to pay AOCP in FY 85.

QUESTION: Two years ago the Marines testified that they would not need AOCP after 1983.

Is this still accurate?

ANSWER: The Marines decided it was necessary to pay AOCP in FY 84, but as stated previously, they do not plan to pay it in FY 85.

QUESTION: Are the Navy and Marines paying AOCP to all aviators in fiscal year 1984?

Are there aviator shortages in the Navy and Marines in fiscal year 1984?

ANSWER: The prospect of AOCP in FY 84 has been highly effective in retaining younger aviators during the fifteen months when new payments were not authorized. Application of FY 84 AOCP is being made to all aviators in consideration of the many Navy and Marine Corps aviators who remained in the service in anticipation of the bonus after this delay.

There are shortages of aviators in the Department of the Navy. Within the Navy these shortages exist at the mid-grades (O-1 to O-5), and in the Marine Corps they exist in the company grades (O-1 to O-3). Specific authorizations versus inventory by specialty for FY 84 within these grades are projected as follows:

NAVY MID-GRADES (O-3 to O-5)

	PILOT			NFO			TOTAL		
	AUTH	INV	%	AUTH	INV	%	AUTH	INV	%
FY 84	8310	7731	89%	3810	3954	103%	12120	11685	96%

MARINE CORPS COMPANY GRADES (O-1 to O-3)

	PILOT			NFO			TOTAL		
	AUTH	INV	%	AUTH	INV	%	AUTH	INV	%
FY 84	2802	2615	93%	535	380	71%	3337	2995	90%

SELECTIVE REENLISTMENT BONUS MANAGEMENT INITIATIVES

QUESTION: The Defense Inspector General, the General Accounting Office, and the Grace Commission have all criticized the Defense Department's management of the Selective Reenlistment Bonus program. What has your office done to reform management of this program?

ANSWER: DoD has taken a number of management actions designed to make the SRB program more efficient and effective. Initiatives are concentrated in areas designed to (a) improve selectivity in designating skills for SRB; (b) place increased emphasis on full utilization of the bonus recipients in the skill for which the bonus was paid; (c) increase data processing support for more efficient program management, and (d) improve recoupment procedures. These measures are producing positive results. The Department believes that the SRB is vital to successful retention and is committed to administering the most cost-effective program possible.

NAVY SRB COSTS

QUESTION: The average cost of Navy SRBs is increasing in 1985 because of higher multiples. What specific requirements are causing this?

ANSWER: Navy is increasing SRB multiples in skills with inventory shortages. The Navy's fiscal year 1985 award level plan is a result of a skill by skill review of retention rates and manning levels. By raising award levels in selected skills with shortages, Navy can capitalize on the current retention climate to reduce the overall Petty Officer imbalance.

NEW ENTITLEMENTS

QUESTION: In the fiscal year 1985 budget, DoD is requesting several new entitlements. Last year the Congress authorized a new entitlement for students to travel overseas to visit their families. The budget request was for $1 million. The costs escalated to $2.3 million before funds were appropriated. Now DoD says the costs have grown to $4.3 million.

Considering the history of cost growth associated with new entitlements like Dependent Student Travel and VHA, why should the Congress approve additional entitlements?

ANSWER: We understand the Committee's concern about the costs of these programs, but as with any new initiative, it is possible some adjustments may occur during the initial stages due to circumstances unknown at the time of the initial estimate. Ideally, once the projected cost is submitted, the Department would like to stay within that cost, and we attempt to do so, but we have no control over such things as housing costs, transportation costs or the rate of inflation. All these elements were factors, to some degree, in the above programs, as well as in a number of other military entitlements. Any additional benefits the Department may seek in the future will be thoroughly reviewed at all levels to insure closer alignment with the initial estimate.

TEMPORARY LODGING EXPENSE

QUESTION: There is no line item for Temporary Lodging Expense in the budget, but you say in your statement that you will implement the program.

How will you fund temporary lodging expenses? By reprogramming?

ANSWER: We do not know at this time whether funds will become available to fund TLE. However, if funds do become available during FY 1985, the Department will request authority to reprogram funds to implement the program.

MONETARY ALLOWANCE IN LIEU OF TRANSPORTATION

QUESTION: Again you are requesting an increase for mileage from 13 to 15 cents a mile. Considering all the past increases in benefits, why is this necessary?

Does 15 cents a mile reimburse owners for costs associated only with gas and upkeep on a car, or are such areas as licensing, registration and other overhead costs also covered?

ANSWER: The mileage allowance is intended to reimburse members for the cost of operating their privately owned vehicle during PCS moves. The rate takes into consideration the costs associated with such things as gas, oil, maintenance, tires, depreciation, licenses and taxes. The proposed increase is consistent with the guidance provided by the House in its report on the FY 82 Appropriation Act. Using the House formula for determining the "per mile" cost of operating a POV, a DoD study group documented that 16¢ per mile is actually needed. The 15¢ per mile requested would provide servicemembers the amount federal civilians currently receive.

HOUSEHOLD GOODS WEIGHT ALLOWANCE

QUESTION: Considering the large increases in military benefits since 1980, will the Defense Department offer offsets in military personnel benefits to fund the increases in household goods weight allowances?

ANSWER: No, that will not be necessary. The President's FY 85 budget includes funding for the requested increases in the household goods weight allowance.

DEPENDENCE ON CONTRACTORS

QUESTION: Is it correct that the Defense Department is becoming more dependent on contractor personnel to ensure our warfighting capability?

ANSWER: The principal area where contracting out occurs is with base operating support personnel and functions. When the Armed Services contract for these services, it results in placing more military personnel and DoD civilians to work on improving the military capability of our fighting forces. For essential services where military and DoD civilians provide maintenance assistance there is no evidence of a dramatic increase in contractor support.

CONTRACTOR RETENTION

QUESTION: What guarantees do you have that contractor personnel will stay on the job in the event of a crisis?

ANSWER: There are no guarantees that contractor personnel will remain on the job. The Department of Defense is currently preparing a policy document which will require contractors to provide the necessary incentives and assurances to ensure that their employees will perform those services that are essential to the support of military forces overseas during crises. It is envisioned that these provisions for continuity of essential services would be one of the factors to be evaluated in the competitive bid process.

STRIKE

QUESTION: How would a strike by employees of a company like Honeywell affect national security?

ANSWER: The strike of any major corporation which manufactures and supports DoD weapon systems and equipment would have an adverse impact on national security. The impact would be a function of the length of the strike, the nature of the systems manufactured or supported and the availability of alternative sources.

CONTRACTING DECISIONS

QUESTION: What message does the current dependence on contractor personnel provide for further contracting out decisions?

ANSWER: Contracting out of services in CONUS has proven to be economical and results in releasing military personnel from functions which the private sector can best manage. In that context it enhances our warfighting capability. Contracting for overseas support of critical systems should provide for language which delineates contractor and government responsibility. That language is being formulized into a DoD policy document.

FIFTH QUADRENNIAL REVIEW OF MILITARY COMPENSATION (QRMC)

QUESTION: You have included funding for several legislative provisions based on QRMC recommendations in the fiscal year 1985 request. Has the Department of Defense completed its review of the QRMC?

Why haven't you addressed the QRMC recommendations on military retirement?

ANSWER: The analysis of various military compensation items has been completed by the QRMC. With regard to the special and incentive pays and several survivor benefits, the QRMC analysis led to certain recommendations for improving those compensation items that would require legislative change. We are now in the process of preparing the necessary amendments that would implement the recommendations. On the military retirement issue, however, the QRMC analysis did not lead to specific recommendations. It did result in presenting a set of alternatives. Given the complexity of the subject and its importance to force management, as well as the implications for fiscal and national security policy, we are continuing our evaluation of the system.

The report on the QRMC is being prepared for transmittal to the Congress. The analysis and information will be a valuable asset as the legislation to support the recommendations is considered.

ENLISTMENT BONUSES

QUESTION: Considering that recruiting goals have been met for the past several years and the quality of the active force is at an all time high, why is this the time to discuss cutting back on enlistment bonuses?

ANSWER: In the early 1980's, DoD focused its attention on the enlistment bonus program to improve the quality of the enlisted force and to initiate incentives designed to competively attract high-quality enlistees into military service. The House/Senate Conference Report accompanying the Uniformed Services Pay Act of 1981 (H. Rept. No. 97-265) directed the Secretary of Defense to conduct a test of expanded bonuses for enlistment into the armed forces. The Enlistment Bonus Test, developed with the assistance of the Department of the Army and the Rand Corporation, began on 29 June 1982 and is expected to continue for two years, through June 1984. Interim reports were submitted to the Committees on Armed Services of the

Senate and House of Representatives in March 1983 and again in February 1984 with a final report scheduled for 31 December 1984. In order to complete the analysis of the effects of enhanced bonuses on numbers of high-quality enlistments and not jeopardize the validity of conclusive results, our position is that current enlistment incentives should remain intact until the test is concluded.

DELAYED ENTRY PROGRAM

QUESTION: What are the costs in the 1985 budget request related to the longevity pay associated with the Delayed Entry Program (DEP)?

ANSWER: Although we are aware that several estimates of the cost of the Delayed Entry Program (DEP) have been completed in the past, we are not confident that any of these estimates are accurate. Consequently, the Services have recently undertaken analyses of the cost of DEP longevity pay credit. Since the size of the DEP pool, average time in DEP, and number of non-prior service (NPS) accessions have varied significantly during the past five years, costs are being estimated for a variety of scenarios.

DEP LONGEVITY PAY

QUESTION: What evidence does the Defense Department have which demonstrates the DEP longevity pay is an important determinant in recruiting success?

ANSWER: The best evidence of the role played by the DEP is its long-term contribution to the overall recruiting success of the Department of Defense. The DEP was first used in 1963 and authorized applicants to be held for a 270-day period. In 1977, we authorized the Services to extend the DEP to 365 days.

The DEP accommodates each enlistee's preference as to when he/she wants to enter active duty and provides flexibility to smoothly and cost efficiently manage training programs in a dynamic recruiting environment. It is particularly effective in recruiting high-quality high school seniors by allowing them to reserve jobs after graduation.

Since military training attrition rates are inversely related to time in the DEP, training costs are reduced. Additionally, better training pipeline management is possible through more efficient scheduling of classes. Also, by providing more time for fuller background investigations, the DEP system contributes to cost savings by reducing fraudulent enlistments.

Joining the DEP is a clear sign of an applicant's willingness to enter active duty, and longevity pay recognizes that DEP enlistees are committing themselves to military service and call-up from Reserves status upon mobilization.

In Service surveys, basic trainees have rated pay and allowances among the top five benefits. We believe the monetary appeal of longevity pay credit is inherent in this ranking. This monetary appeal may also be a significant recruiting tool for recruiters to "close the sale" and reinforce the applicant's decision to join. Later on, the longevity credit entitlement may be instrumental in keeping an applicant committed who is otherwise having doubts.

While the Department of Defense has never specifically researched the role of longevity pay as a recruitment incentive, we believe the DEP system and the longevity pay credit provide valuable benefits to both the government and the applicant. The DEP enhances management of the recruiting effort and instills in each enlistee a feeling of membership and commitment. The longevity pay credit is the one entitlement that indicates to the enlistee that he/she becomes a member of the Armed Forces when joining the DEP.

ELIMINATION OF DEP LONGEVITY PAY

QUESTION: What would be the cost savings and anticipated negative impact from an elimination of the longevity pay provisions associated with the DEP program? When would these savings start to accrue?

ANSWER: First, any change to DEP pay policy will not affect Military Pay Appropriation estimates until approximately two years after it is implemented. This is because the longevity aspect of pay will not change a member's years of service for pay computation until completion of over two years of service. The Delayed Entry Program (DEP) is invaluable to both enlistees and the Services. It is an essential mechanism which permits enlistees to finish any responsibilities in their personal lives before they access and, equally as important, provides the military with an effective means to operate its training management system. There is, however, no evidence which ties the criticality of the DEP longevity pay raise to recruiting success. Any prediction of what its elimination would do to the recruiting effort would be purely speculative.

CONTRACTUAL OBLIGATIONS - DEP

QUESTION: Under the DEP what obligations do the individuals have to the military?

ANSWER: The Delayed Entry Program (DEP) is a critical means of attracting high quality youth to military service and a requisite device for the Services to operate training seat management effectively. DEP attrition is due primarily to applicants' inability to meet enlistment standards at the time of accession. Failure to graduate from high school, physical incapacitation and moral disqualification, such as a law violation, are typical conditions which may invalidate enlistment eligibility.

The military views its obligation to the individual in the DEP precisely as worded on the enlistment contract. That is, a given Service will provide training, assignment location, bonus and/or any other incentive as specifically stated in the contract. Enlistees in the DEP are obligated to serve in the active force for the length of time specified in their contract plus a follow-on Reserve commitment. The total Military Service Obligation (MSO) has recently been extended from six to eight years, effective June 1, 1984. The individual enlisting in the DEP is also required to access into the active force on the date indicated in the enlistment agreement. Other requirements are contingent upon variables such as mobilization in event of national emergency or failure to fulfill one's Military Service Obligation successfully.

DELAYED ENTRY PROGRAM

QUESTION: What percent of individuals in DEP fail to enlist in the military?

ANSWER: The percentage has generally ranged between 8 to 17 percent varying over time and with each Service.

MISCELLANEOUS GAINS AND LOSSES ADJUSTMENTS

QUESTION: Why is there such a large increase in "direct appointments"?

ANSWER: As with the "other enlisted commissioning program" accessions, direct appointments are a short lead time accession source. An increased number of direct appointments has been programmed in FY 1985 based on the total planned FY 1985 officer community growth. This direct appointment growth will partially offset the negative impact of minimal FY 1984 growth and allow realization of needed Medical Corps growth.

QUESTION: What is causing the large increase in the "other enlisted commissioning program" in FY 1985?

ANSWER: Many officer accession sources, such as NROTC and the Naval Academy, are level loaded several years in advance and thus are affected very little by changes to officer end strength. To obtain the remaining officer accessions required to man the Navy, short lead time sources, such as Officer Candidate School (OCS), Aviation Officer Candidate School (AOCS) and enlisted commissioning programs, are used. These accession sources, which comprise the "other enlisted commissioning program" category, allow flexibility in the overall numbers of accessions, with the quantity tending to vary directly with changes in officer end strength controls. As a result, accessions from these sources have been programmed to be proportionately higher in growth years such as FY 1985.

QUESTION: On what are you basing the increased projection for reenlistments in fiscal year 1985?

ANSWER: We are predicting an increased number of reenlistments in FY 1985 because the number of personnel coming to expiration of their obligated active service is larger than in the past years. This larger number is due to accessions brought into the Navy in FY 1981 (106,322) and the number of short term extensions executed in FY 1983 and 1984 which are due to expire in FY 1985.

QUESTION: Please explain what the category "loss adjustment" comprises in FY 1984.

ANSWER: Loss file adjustment, as well as the gain file adjustment, is an accounting adjustment made in strength plans to balance the paygrade structure to match the computer generated manpower reports. Numbers reflected in the adjustment are not included in separation or gain profiles.

FY 1984 EXECUTION CHANGES

QUESTION: In FY 1984 execution, why was $1.2 million removed from the Selective Reenlistment Bonus program?

ANSWER: Navy transferred $1.2 million from the Selective Reenlistment Bonus program to the Proficiency Pay program. The transfer was necessary because there were approximately six percent more personnel eligible for Proficiency Pay than originally anticipated when the FY 1984 budget was prepared.

QUESTION: What has caused the large increase in FY 1984 enlisted special pays from the amount appropriated?

ANSWER: The large increase in FY 1984 enlisted special pays is the result of increases in the number entitled and the average rate per pay grade for sea pay.

Subsequent to submission of the FY 1984 President's Budget in January 1983, pay and allowance entitlement data showed increases in the numbers and average years of sea service for personnel entitled to career sea pay and premuim sea pay in FY 1983. Consequently, 1983 sea pay costs from the FY 1984 President's Budget to the FY 1985 President's Budget increased $19.2 million due to more personnel entitled and $5.5 million due to higher rates resulting from more average sea service time per pay grade. FY 1984 sea pay requirements in the FY 1985 President's Budget reflect the FY 1983 cost growth. Sea pay in FY 1984 increased $24.3 million due to more personnel entitled and $5.0 million due to more average years of sea service per pay grade.

MAN-YEARS

QUESTION: If end-strength were frozen at FY 1984 levels, could the funds for the additional man-years as identified on pages I-17, 18 be deleted? Please explain any negative response.

ANSWER: If officer end-strength was frozen at the FY 1984 level, the funds for the additional officer man-years as identified on pages I-17 and I-18 could not be deleted in total. Unprecedented retention of officers in FY 1984 has forced Navy to delay about 408 AOCS/OCS students who would have graduated in FY 1984 but now will not graduate until early in FY 1985. In addition, delayed commitments for officer accessions from direct procurement, the enlisted commissioning program and conversion from warrant officer to limited duty officer status will bowwave about 153 officer gains into early FY 1985. Despite these actions FY 1984 officer man-years will be higher than shown in the FY 1985 President's budget. These factors will increase the FY 1985 officer man-years, thereby effectively reducing the man-years associated with an increase in end-strength. Of the 1992 increase in man-years from FY 1984 to FY 1985 shown on page I-17, it is currently anticipated that only about 600 man-years will be discretionary. Theoretically the funds for these 600 man-years would be eligible for deletion, but the longer it is before a decision is made about FY 1985 end-strength levels the fewer man-years there will be available as more students enter AOCS/OCS in the weeks remaining in FY 1984.

QUESTION: Your request for increased man-years equates to $35,560 per officer man-year. Is this an accurate measure of the cost increase for increased man-years?

ANSWER: The $35,560 per officer man-year is an accurate measure of the Basic Pay, BAQ, VHA, BAS and FICA costs associated with officer force structure changes resulting from the increase in officer man-years from FY 1984 to FY 1985. The only direct cost not included in the $35,560 rate is retired pay accrual which is $13,460 per man-year.

QUESTION: Your request for increased enlisted man-years adds $19,344 per enlisted man-year. Is this an accurate estimate of the cost for increased man-years?

ANSWER: $19,344 per enlisted man-year is not an accurate estimate of the cost for increased man-years. A rate of $20,411 per man-year is a more accurate estimate, comprised of the following cost elements as shown in the FY 1985 President's Budget:

Basic Pay	$15,028
BAQ	3,148
VHA	1,025
Clothing	143
FICA	1,067
	$20,411

In addition, retired pay accrual per increase enlisted man-year is estimated to be $7,644. It should be noted that $20,411 (or, $28,075 if retired pay accrual is added) is not an accurate measure of cost savings per man-year that would be realized if end strength were reduced. Man-year savings resulting from an end strength reduction will depend on how the strength reduction can be effected within execution constraints.

SELECTIVE REENLISTMENT BONUS

QUESTION: Considering excellent retention rates during recent years and the significant decline in the petty officer shortfall, why is it necessary to increase the number and amount of reenlistment bonuses in FY 1985?

ANSWER: Navy is increasing SRB multiples in skills with inventory shortages. The Navy's FY 1985 award level plan is the result of a skill-by-skill review of retention rates and manning levels. While it is true that overall retention has been excellent, severe shortages and poor retention persist in many critical skills. SRB is effective in improving skill-specific retention and does contribute to the overall improved retention climate. Without targeted SRB, skill-specific retention in particular, ~~and~~ Navy-wide retention in general, would be lower. Without the requested number and amount of bonus increases we will be unable to adequately improve retention in those critical skills which have been unresponsive to current bonus levels.

QUESTION: Why is it necessary to expand the window of eligibility for reenlisting?

ANSWER: Opening the early reenlistment window an additional three months would permit Navy to take advantage of the present high retention climate and lock-in sailors with critical skills at modest

SRB levels. The current 60 day window, the most restrictive of all the services, is a disincentive in that it delays reenlistment decisions until the eleventh hour and forces the satisfied sailor to consider private sector alternatives. The expanded window would still be among the most conservative of all the services. Opening the window is a one-time expense which would not carry over into FY 1986.

QUESTION: What percent of anticipated reenlistments in FY 1985 are eligible for SRBs? That is, meeting the length of service requirement.

ANSWER: We project that 37 percent of FY 1985 Navy reenlistments will be eligible for SRB.

QUESTION: How many reenlistments do you expect in 1985 that are eligible for SRBs by time in service but will not receive a SRB payment?

ANSWER: We project that 31,987 FY 1985 reenlistments will be eligible for SRBs by time in service but will not recieve a SRB payment.

QUESTION: Projected reenlistments are up by 7% in 1985, why should reenlistment bonuses increase by 22%

ANSWER: The increase in SRB new payments consists of growth in the award level plan, opening the early reenlistment window an additional three months, and opening the STAR program to non-nuclear trained ratings.

The growth in the award level plan was determined by conducting a skill by skill review of the:

a. retention objective: the total number of reenlistees required in specific year groupings to sustain the Career force of that skill

b. retention experience: the actual and projected number of reenlistees in specific year groupings

c. career manning level: the extent to which the inventory of qualified career members meets the approved requirements for career members in that skill

d. training investment: the training and replacement cost for an individual at a given length of service

In more general terms, the increase over the FY 1984 budget that resulted from this OSD approved award level plan can be attributed to an increase in the number of eligibles to reenlist of 11,446 and growth in the TOP 5 (E5-E9) inventory of 8,000.

Opening the Early Reenlistment Window for an additional three months would permit Navy to take advantage of the current high retention climate and lock-in sailors with critical skills at modest SRB levels. The current 60 day window, the most restrictive of all the services, is a disincentive in that it delays reenlistment decisions until the 11th hour and forces the satisfied sailor to consider private sector alternatives. The expanded window would still be among the most conservative of all the services. Opening the window is a one-time expense which would not carry over into FY 1986.

Reopening the STAR program (currently only available to nuclear trained sailors) would allow Navy to lock-in a junior petty officer at the 2 year point until the 8 year point and to channel personnel into critical skills where the Navy needs them. The STAR program offers the member with 2-6 years of service a guaranteed assignment to an "A" or "C" school, advancement to E-4 or E-5 upon graduation from "A" or "C" school respectively, and SRB if the rating is eligible, in return for an agreement to reenlist for 6 years. STAR has no significant additional cost in the outyears since SRB will be paid at the 2 year point vice the 4 year point. It is a positive additional incentive that can be used to obtain and retain petty officers with critical sea intensive skills.

QUESTION: Please provide a chart which depicts the number of reenlistments actual and programmed by MOSs in zones A-C in which SRBs are paid and the average initial payment for FY 1983, 1984 and 1985.

ANSWER: The attached chart reflects actual reenlistments for FY 1983 and projected reenlistments for FY 1984 and FY 1985. Figures for FY 1985 do not include 3,200 additional reenlistments resulting from opening the window three months or an additional 1700 Zone A reenlistments if SRB were paid in conjunction with a STAR (Selective Training and Reenlistment) reenlistment. Average initial payments are:

FY 1983:	$5,532
FY 1984:	$5,788
FY 1985:	$6,144

Zone A

Skill (Rating)	FY 1983	FY 1984	FY 1985
Aviation Boatswain's Mate (ABE)	145	128	221
Air Traffic Controller (AC)	219	125	134
Aviation Fire Control Technician (AQ)	232	123	144
Aviation Support Equipment Technician (Electrical) (ASE)	61	27	64
Aviation Support Equipment Technician (Mechanical) (ASM)	61	43	109
Aviation Electronics Technician (AT)	918	390	710
Aviation Antisubmarine Warfare Operator (AW)	156	98	258
Aviation Antisubmarine Warfare Technician (AX)	204	108	129
Boiler Technician (BT)	765	426	496
Builder (BU)	0	39	0
Construction Electrician (CE)	38	35	74
Construction Mechanic (CM)	0	44	0
Cryptologic Technician (Interpretive) (CTI)	20	70	38
Cryptologic Technician (Maintenance) (CTM)	130	148	186
Cryptologic Technician (Collection) (CTR)	90	96	120
Cryptologic Technician (Technical) (CTT)	154	141	222
Data Systems Technician (DS)	297	233	227
Engineering Aid (EA)	12	15	27
Electrician's Mate (EM)	619	969	732
Electronics Technician (ET)	886	1209	1152
Electronic Warfare Technician (EW)	135	113	150
Equipment Operator (EO)	0	37	186
Fire Control Technician (Ballistic Missile Fire Control) (FTB)	10	31	35
Fire Control Technician (Gun Fire Control) (FTG)	327	302	294
Fire Control Technician (Missile Fire Control) (FTM)	257	161	214
Gunner's Mate (Guns) (GMG)	339	230	274
Gunner's Mate (Missiles) (GMM)	95	52	36
Gunner's Mate (Technician) (GMT)	110	72	97
Gas Turbine Systems Technician (Electrical) (GSE)	29	16	25
Gas Turbine Systems Technician (Mechanical) (GSM)	77	90	99

Zone A

Skill (Rating)	FY 1983	FY 1984	FY 1985
Hull Maintenance Technician (HT)	883	523	673
Interior Communications Electrician (IC)	508	315	365
Instrumentman (IM)	30	25	33
Intelligence Specialist (IS)	0	41	99
Molder (ML)	15	11	18
Machinist's Mate (MM)	1322	1512	1013
Machinery Repair (MR)	158	154	199
Mess Management Specialist (MS)	900	865	0
Missile Technician (MT)	305	89	0
Opticalman (OM)	15	10	14
Operations Specialist (OS)	587	428	473
Patternmaker (PM)	11	6	6
Quartermaster (QM)	289	238	320
Radioman (RM)	1069	845	918
Signalman (SM)	121	151	205
Sonar Technician (Surface) (STG)	312	284	350
Sonar Technician (Submarine) (STS)	94	108	168
Torpedoman's Mate (TM)	359	0	0

Zone A

Skill (NEC)	FY 1983	FY 1984	FY 1985
Analyst-Forecaster (AG-7412)	13	15	16
Russian (CTI-9201/9230)	30	31	34
Spanish (CTI-9203/9233)	3	11	12
Arabic (CTI-9216/9236)	5	11	12
Hebrew (CTI-9215/9235)	0	1	1
Korean (CTI-9212/9232)	3	3	3
NTDS Technician (DS-1615)	1	0	0
SLQ-32 (V) 1&2 Technician (EW-1733)	15	1	0
SLQ-32 Technician (EW-1734)	1	2	8
SLQ-32 (V) 2 Technician (EW-1753)	2	1	1
Phalanx Technician (FTG-1127)	6	9	0
5"/54 MK 42 (GMG-0876)	22	9	10
5"/54 MK 45 (GMG-0877)	12	6	7
76MM/62 Caliber Gun Mount (GMG-0878)	7	0	0
Terrier Missile Technician (GMM-0986)	14	21	22
TARTAR Missile Technician (GMM-0987)	0	9	10
MK 26 Launcher (GMM-0989)	1	2	1
MK 13 Launcher (GMM-0991)	3	5	3
ASROC Technician (GMT-0891/0893)	0	5	5
Non-Nuclear Welder (HT-4955)	36	10	2
Nuclear Power Plant Welder (HT-4956)	27	13	0
Gamma/x-ray Radiographer Inspector (HT-4933)	0	1	0
Non Destructive Test Inspector (HT-4935)	2	1	0
Air Intercept Controller (OS-0313)	4	6	4
Antisubmarine Air Controller (OS-0316)	17	38	38
NTDS Air Intercept Controller (OS-0318)	6	8	9
Supervisory NTDS Air Intercept Control (OS-0319)	0	1	1
NTDS Antisubmarine Air Control (OS-0321)	1	8	9
Communications System Technical Control Operator (RM-2318)	9	21	23
Teletype Repairman (RM-2342)	54	49	0
FFG-7 Class Sonar Technician (STG-0402)	1	5	5
SQS-53 ASW Fire Control Technician (STG-0473)	0	1	1
SQS-53 ASW Fire Control Technician ASROC (STG-0475)	0	1	1
SQQ-23 ASW Fire Control Technician ASROC (STG-0477)	0	1	0

Zone A Nuclear Power NEC's	FY 1983	FY 1984	FY 1985
Sub Plant Operator-Welder (3351)	34	44	49
Sub Plant Operator-Reactor Control (3353)	311	241	268
Sub Plant Operator-Electrical (3354)	549	315	349
Sub Plant Operator-Mechanical (3355)	584	479	494
Sub Plant Operator-Eng. Lab Tech. (3356)	147	89	98
Sub Plant Operator-Special Category (3359)	0	1	1
Sub Plant Supervisor-Reactor Control (3363)	1	1	1
Sub Plant Supervisor-Electrical (3364)	2	0	0
Surface Plant Operator-Reactor Control (3383)	43	46	36
Surface Plant Operator-Electrical (3384)	52	59	66
Surface Plant Operator-Mechanical (3385)	135	131	144
Surface Plant Operator-Eng. Lab Tech. (3386)	19	22	24
Surface Plant Operator-Special Category (3389)	3	5	5
Special Warfare NEC's			
Saturation Diver (5311)	0	1	1
Combat Swimmer (5320)	5	2	1
Underwater Demolition (UDT-5321)	44	38	42
Sea, Air and Land Warfare (SEAL-5326)	32	41	45
EOD Assistant (5331)	0	4	6
Explosive Ordnance (EOD 5332/5333)	42	24	24
First Class Diver (5342)	7	35	35
Second Class Diver (5343)	88	64	71
Special Operations Tech (HM-8492)	12	6	7
Diving Med. Tech (HM-8493)	11	13	13
Skill (NEC)			
Aero Med Tech (HM-8406)	58	32	65
Cardio Pulmonary Tech (HM 8408)	0	9	10
Preventative Med Tech (HM-8432)	34	44	49
X-Ray Tech (HM-8452)	43	58	65
Adv. Lab Tech (HM-8506)	54	110	123
Pharmacy Tech (HM-8482)	42	80	90
Advanced Ocular (HM-8445)	5	0	0

Zone A

Skill (NEC)	FY 1983	FY 1984	FY 1985
Centrifugal Air Cond. Mech (EN-4291)	0	4	4
DD963 Aux Sys Tech (EN-4398)	0	12	6
Elevator Mech (EN-4296)	0	1	1
FFG-7 Aux Tech (EN-4381)	0	2	2
FFG-7 Aux Tech (Fin Stabilizer) (EN-4382)	0	1	1
PHM Tech (EN-9539)	0	1	0
Submarine Fire Control Technician FTG (SS)	0	14	30
Sub Radioman Crypto Tech (RM-23CQ)	0	5	5
Sub Radioman Digital Comm Equip Tech (RM-23EJ)	0	9	9
Sub Radioman Maintenance Tech (RM-23MZ)	0	9	9
Pressure Fire Boiler Operator (BT-4515)	0	1	0
VT, MT, PT Operator Inspector (HT-4931)	0	7	0
Gamma Xray Radiographer (HT 4932)	1	0	0

Zone B

Skill (Rating)	FY 1983	FY 1984	FY 1985
Aviation Boatswain's Mate (ABE)	57	87	110
Air Traffic Controller (AC)	93	89	96
Aviation Ordnancemen (AO)	262	0	377
Aviation Fire Control Technician (AQ)	50	71	90
Aviation Support Equipment Technician (Electrical) (ASE)	27	17	31
Aviation Support Equipment Technician (Mechanical) (ASM)	0	24	109
Aviation Electronics Technician (AT)	370	361	492
Aviation Antisubmarine Warfare Operator (AW)	107	118	142
Aviation Antisubmarine Warfare Technician (AX)	83	36	53
Boiler Technician (BT)	376	364	450
Builder (BU)	33	20	0
Construction Electrician (CE)	21	12	37
Construction Mechanic (CM)	28	0	57
Cryptologic Technician (Interpretive) (CTI)	*24*	27	10
Cryptologic Technician (Maintenance) (CTM)	74	114	112
Cryptologic Technician (Collection) (CTR)	85	99	114
Cryptologic Technician (Technical) (CTT)	78	118	114
Data Processing Technician (DP)	116	0	0
Data Systems Technician (DS)	129	141	162
Engineering Aid (EA)	4	2	9
Electrician's Mate (EM)	307	471	462
Engineman (EN)	223	0	0
Equipment Operator (EO)	34	0	0
Electrician Technician (ET)	385	537	548
Electronics Warfare Technician (EW)	28	64	70
Fire Control Technician (Ballistic Missile Fire Control) (FTB)	79	26	27
Fire Control Technician (Gun Fire Control) (FTG)	73	95	83
Fire Control Technician (Missile Fire Control) (FTM)	112	109	128
Gunner's Mate (Missiles) (GMM)	24	49	44
Gunner's Mate (Technician) (GMT)	49	43	75
Gas Turbine System Technician (Electrical) (GSE)	20	16	15
Gas Turbine System Technician (Mechanical)(GSM)	33	42	69
Hull Maintenance Technician (HT)	261	365	382
Interior Communications Electrician (IC)	165	173	200

Zone B

Skill (Rating)	FY-1983	FY-1984	FY-1985
Instrumentman (IM)	13	12	13
Intelligence Specialist (IS)	38	61	90
Molder (ML)	10	5	3
Machinist's Mate (MM)	537	810	979
Mess Management Specialist (MS)	338	397	0
Missile Technician (MT)	39	55	73
Opticalman (OM)	12	7	7
Operations Specialist (OS)	181	117	115
Patternmaker (PM)	2	1	0
Quartermaster (QM)	105	167	198
Radioman (RM)	447	611	697
Signalman (SM)	89	116	141
Sonar Technician (Surface) (STG)	70	91	119
Sonar Technician (Submarine) (STS)	49	75	91
Steelworker (SW)	12	0	0
Torpedoman's Mate (TM)	94	64	0
Utilitiesman (UT)	17	0	0

Zone B

Skill (NEC)	FY 1983	FY 1984	FY 1985
Analyst-Forecaster (AG-7412)	17	35	40
Russian (CTI-9201/9230)	11	27	32
Spanish (CTI-9203/9233)	3	4	4
Arabic (CTI-9216/9236)	3	7	6
Hebrew (CTI-9215/9235)	0	1	1
Korean (CTI-9212/9232)	1	3	3
NTDS Technician (DS-1615)	3	4	5
SLQ-32 (V) 1&2 Technician (EW-1733)	4	0	0
SLQ-32 Technician (EW-1734)	1	1	1
Phalanx Technician (FTG-1127)	1	2	0
5"/54 MK 42 (GMG-0876)	25	44	50
5"/54 MK 45 (GMG-0877)	6	27	33
76MM/62 Caliber Gun Mount (GMG-0878)	6	3	0
ASROC Technician (GMT 0891/0893)	0	10	10
Terrier Missile Technician (GMM-0986)	0	13	16
TARTAR Missile Technician (GMM-0987)	0	11	12
MK 26 Launcher (GMM-0989)	1	0	0
MK 13 Launcher (GMM-0991)	1	1	1
VT, MT and PT Operator/Inspector (HT-4931)	0	3	2
Non-Nuclear Welder (HT-4955)	19	13	14
Nuclear Power Plant Welder (HT-4956)	12	9	0
Gamma/x-ray Radiographer (HT-4932)	3	0	0
Gamma/x-ray Radiographer Inspector (HT-4933)	1	2	2
Non Destructive Test Inspector (HT-4935)	3	4	4
VT, MT and PT Examiner (HT-4936)	0	1	0
Non Destructive Test Examiner (HT-4938)	1	0	0
Radiographer Test Inspector (HT-4939)	1	0	0
Air Intercept Controller (OS-0313)	1	16	19
Antisubmarine Air Controller (OS-0316)	5	52	54
NTDS Air Intercept Controller (OS-0318)	3	49	52
Supervisory NTDS Air Intercept Control (OS-0319)	1	11	13
NTDS Antisubmarine Air Control (OS-0321)	4	17	18
Communications System Technical Control Operation (RM-2318)	27	67	76
Communications System Technical Control Supervisor (RM-2319)	2	4	4

Zone B

Skill (NEC's)	FY 1983	FY 1984	FY 1985
Teletype Repairman (RM-2342)	28	38	89
FFG-7 Class Sonar Technician (STG-0402)	0	2	3
SQS-53 ASW Fire Control Technician ASROC (STG-0474)	5	0	0
SQQ-23 ASW Fire Control Technician ASROC (STG-0477)	0	1	1
SQS-26C (STG-0483)	1	4	4
Centifugal Air Cond. Mech (EN 4291)	0	21	23
DD963 Aux Sys Tech (EN 4398)	0	2	1
Elevator Mech (EN 4296)	0	1	1
FFG-7 Aux Tech (EN 4381)	0	4	5
FFG-7 Aux Tech (Fin Stabilizer) (EN 4382)	0	1	1
PHM Tech (EN-9539)	0	1	1
Submarine Fire Control Technician - FTG (SS)	0	21	47
Sub Radioman Crypto Tech (RM 23CQ)	0	5	5
Sub Radioman Digital Comm Equip Tech (RM-23EJ)	0	5	5
Sub Radioman Maintenance Tech (RM 23MZ)	0	5	5
Nuclear Power NEC's			
Sub Plant Operator-Welder (3351)	1	5	6
Sub Plant Operator-Reactor Control (3353)	5	9	10
Sub Plant Operator-Electrical (3354)	8	26	30
Sub Plant Operator-Mechanical (3355)	10	17	19
Sub Plant Operator-Eng. Lab Tech. (3356)	6	15	17
Sub Plant Operator-Special Category (3359)	15	22	26
Sub Plant Operator-Supervisor-Welder (3361)	3	4	4
Sub Plant Supervisor-Reactor Control (3363)	45	58	67
Sub Plant Supervisor-Electrical (3364)	46	38	44
Sub Plant Supervisor-Mechanical (3365)	32	37	42
Sub Plant Supervisor-Eng. Lab Tech. (3366)	15	10	12
Surface Plant Operator-Reactor Control (3383)	2	2	2
Surface Plant Operator-Electrical (3384)	0	8	9
Surface Plant Operator-Mechanical (3385)	6	10	12
Surface Plant Operator-Eng. Lab Tech. (3386)	1	1	1
Surface Plant Operator-Special Category (3389)	2	6	7
Surface Plant Supervisor-Reactor Control (3393)	4	9	10
Surface Plant Supervisor-Electrical (3394)	5	4	5
Surface Plant Supervisor-Mechanical (3395)	3	4	4
Surface Plant Supervisor-Eng. Lab. Tech. (3396)	2	2	2

Zone B

Special Warfare NEC's

	FY 1983	FY 1984	FY 1985
Saturation Diver (5311)	4	25	25
Underwater Demolition (UDT-5321)	19	25	26
Underwater Demolition/Explosive Ordnance (5322)	0	1	1
Sea, Air and Land Warfare (SEAL-5326)	25	46	50
Sea, Air and Land Warfare/Explosive Ordnance (SEAL/EOD 5327)	1	6	6
Explosive Ordnance (EOD 5332/5333)	21	53	55
Master Driver (5341)	0	1	3
First Class Diver (5342)	35	58	67
Second Class Diver (5343)	15	10	11
Master Saturation Diver (5346)	0	1	4
Special Operations Tech (HM-8492)	4	5	5
Diving Med. Tech (HM-8493)	10	13	15
Hospital Corpsman (NEC)			
Preventative Med Tech (HM-8432)	32	44	83
X-Ray Tech (HM-8452)	0	51	60
Nuc. Sub Med Tech (HM-8402)	15	28	30
Pharmacy Tech (HM-8482)	26	47	55
Advanced Bio Med Equip. Tech (HM-8478)	19	20	23
Cardiopulmonary Tech (HM-8408)	0	6	7

Zone C

Skill (Rating)	FY-1983	FY-1984	FY-1984
Aviation Fire Control Technician (AQ)	0	0	73
Aviation Antisubmarine Warfare Technician (AX)	35	18	47
Boiler Technician (BT)	113	87	0
Data Systems Technician (DS)	58	55	54
Electronics Technician (ET)	261	313	258
Electronics Warfare Technician (EW)	23	44	30
Fire Control Technician (Ballistic Missile Fire Control) (FTB)	14	17	10
Fire Control Technician (Gun Fire Control) (FTG)	47	91	22
Fire Control Technician (Missile Fire Control) (FTM)	39	76	79
Gunner's Mate (Missiles) (GMM)	11	0	3
Gunner's Mate (Technician) (GMT)	32	36	40
Gas Turbine Systems Technician (Electrical) (GSE)	13	7	6
Gas Turbine Systems Technician (Mechanical) (GSM)	14	21	17
Hull Maintenance Technician (HT)	178	257	190
Interior Communications Electrician (IC)	66	126	101
Machinist's Mate (MM)	325	0	0
Missile Technician (MT)	36	51	43
Operations Specialist (OS)	11	0	96
Sonar Technician (Surface) (STG)	32	50	31
Sonar Technician (Submarine) (STS)	51	36	31

Zone C

Skill (NEC)	FY 1983	FY 1984	FY 1985
Aircraft Non-Destructive Inspector (AM-7225)	7	0	0
Pressure-Fired Boiler Operator (BT-4515)	4	0	0
NTDS Technician (DS-1615)	0	7	7
SLQ-32 (V) 1&2 Technician (EW-1733)	3	0	0
SLQ-32 Technician (EW-1734)	2	6	6
SLQ-17A Tech (EW-1753)	0	1	1
Phalanx Technician (FTG-1127)	0	6	0
Terrier Missile Technician (GMM-0986)	1	13	16
Tartar Missile Technician (GMM-0987)	0	11	12
MK 26 Launcher (GMM-0989)	0	3	3
MK 13 Launcher (GMM-0991)	1	1	1
Non-Nuclear Welder (HT-4955)	21	25	25
Nuclear Power Plant Welder (HT-4956)	18	9	0
Gamma/x-ray Radiographer Inspector (HT-4933)	0	2	2
Non Destructive Test Inspector (HT-4935)	0	4	5
VT, MT and PT Examiner (HT-4936)	2	0	0
Ultrasonic Test Examiner (HT-4937)	2	0	0
Non Destructive Test Examiner (HT-4938)	2	1	0
Radiographer Test Inspector (HT 4939)	1	0	0
Air Intercept Controller (OS-0313)	8	8	4
Supervisory Air Intercept Controller (OS-0314)	1	2	2
Antisubmarine Air Controller (OS-0316)	12	27	28
NTDS Air Intercept Controller (OS-0318)	7	7	3
Supervisory NTDS Air Intercept Control (OS-0319)	1	11	13
NTDS Antisubmarine Air Control (OS-0321)	2	6	2
Communications System Technical Control Supervisor (RM-2319)	10	6	0
FFG-7 Class Sonar Technician (STG-0402)	3	1	0
SQS-53 ASW Fire Control Technician (STG-0473)	2	2	2
SQS-53 ASW Fire Control Technician ASROC (STG-0474)	4	2	0
SQQ-23 ASW Fire Control Technician ASROC (STG-0475)	2	2	2
SQQ-23 ASW Fire Control Technician ASROC (STG-0477)	1	1	0
SQS-26A Technician (STG-0481)	0	1	1
SQS-26C Technician (STG-0483)	6	10	10

Zone C

Nuclear Power NEC's

	FY 1983	FY 1984	FY 1985
Sub Plant Operator-Reactor Control (3353)	3	0	0
Sub Plant Operator-Electrical (3354)	2	0	0
Sub Plant Operator-Special Category (3359)	12	14	15
Sub Plant Supervisor-Welder (3361)	5	0	0
Sub Plant Supervisor-Reactor Control (3363)	23	25	28
Sub Plant Supervisor-Electrical (3364)	54	46	49
Sub Plant Supervisor-Mechanical (3365)	61	70	77
Sub Plant Supervisor- Eng. Lab Tech. (3366)	17	15	16
Surface Plant Operator-Reactor Control (3383)	1	0	0
Surface Plant Operator-Electrical (3384)	1	0	0
Surface Plant Operator-Mechanical (3385)	1	0	0
Surface Plant Operator-Eng. Lab Tech. (3386)	1	0	0
Surface Plant Operator-Special Category (3389)	4	0	0
Surface Plant Supervisor-Reactor Control (3393)	3	4	4
Surface Plant Supervisor-Electrical (3394)	10	7	4
Surface Plant Supervisor-Mechanical (3395)	13	5	4
Surface Plant Supervisor-Eng. Lab. Tech. (3396)	5	9	10
	5	5	4

Special Warfare NEC's

Saturation Diver (5311)	12	6	5
Master Diver (5341)	0	4	5
Master Saturation Diver (5346)	0	1	1

SELECTIVE REENLISTMENT BONUS

QUESTION: Because SRB payments are paid in installments, the amount to be funded in 1984 is only $210 million. What is the total liability of the program through 1984? What is the government's liability for the program including FY 1985?

ANSWER: Through FY 1984 the total liability of the SRB program will be $482 million. Through FY 1985 the total liability will be $629 million.

QUESTION: Please provide justification explaining the necessity to increase accelerated payments in FY 1985.

ANSWER: Accelerated payments are used to pay anniversary installments prior to the date the anniversary payment is due. Accelerated payments provide assistance to enlisted personnel with documented financial hardships. Examples of hardships that are approved include medical and dental expenses for dependents, defrayment of housing in high cost-of-living areas and unreimbursed PCS transfer costs. The requested increase for accelerated payments reflects the increase in anniversary obligations.

QUESTION: Why is there no decline in the year to year estimated number of anniversary payments?

ANSWER: FY 1983 was the first full year of the 50 percent initial payment with equal annual anniversary payments. Since anniversary installments are paid up to five years after the initial payment, anniversary obligations will compound and increase annually until FY 1988.

QUESTION: Isn't it correct that a portion of SRB recipients fail to meet the established requirements and are not paid the full bonus?

ANSWER: Yes. There are, however, some exceptions as defined in statutes and the implementing DOD directives. Specifically, proceedures require bonus termination and recoupment action for bonus recipients who voluntarily or because of misconduct fail to complete the term of enlistment for which a bonus was paid. The bonus is paid however, to those members who separate or are disqualified from the bonus skill because of factors such as illness, injury or other impairments not the result of the individual's own misconduct. Navy identified approximately $2.2 million for recoupment in FY 1983. This represents less than 1/3 of 1 percent of FY 1983 program obligations.

ENLISTMENT BONUS

QUESTION: What percent of recruitment objectives were met in FY 1983 and to date in 1984?

ANSWER: FY 1983 marked the fourth consecutive year that Navy recruiting achieved its numerical goal and exceeded quality objectives. This trend of success is continuing into FY 1984.

	FY-83		FY-84 (APRIL 84)	
	ATTAINMENT	% OF GOAL	ATTAINMENT	% OF GOAL
USN NPS MALES	53,602	100.0	32,110	102.2
USN NPS FEMALES	8,009	100.0	4,238	100.8
USNR NPS MALES	12,912	100.0	6,392	100.0
USNR NPS FEMALES	449	100.0	251	100.0
PRIOR SERVICE	7,818	100.0	3,380	100.0
READY MARINER/ SEA AIR MARINER	2,008	100.0	3,286	94.9
	84,798	100.0	49,657	101.1

The FY-1985 budget request for recruiting and advertising is designed to continue this success in the face of the increasingly competitive job market brought on by the improving economy and lower unemployment rates.

QUESTION: Why is an increase in enlistment bonuses in FY 1985 necessary?

ANSWER: There is no increase for Navy enlistment bonuses in FY 1985.

CLOTHING ALLOWANCES

QUESTION: What is causing the rate increases in clothing for "on advancement to E-7?"

ANSWER: The rate for clothing issued "on advancement to E-7" will increase in FY 1985 as result of the following changes to the uniform:

Add	Quantity	Item	Extended Price
	1 ea.	CNT * Khaki belt	$ 3.25
	1 ea.	CNT * White belt	3.25
	1 ea.	CNT * Khaki cap cover	4.00
	1 pr.	Black leather gloves	13.24
	2 ea.	CNT * Khaki shirts	30.00
	1 ea.	CNT * White shirts	15.00
	2 pr.	CNT * Khaki trousers	40.00
	2 pr.	CNT * White trousers	22.00
	1 ea.	London Fog raincoat	65.00
		Total	$195.74
Delete	1 ea.	Raincoat, plastic	-37.28
		Total	$158.46

In addition, the rate reflects 4.9 percent inflation.

*Certified Navy Twill

ENLISTED SEPARATION PAYMENTS

QUESTION: In the FY 1984 request enlisted separation payments numbered at 93,374 for 1983 and 96,577 for 1984. Your FY 1985 request shows the decrease in actual 1983 payments to 90,061, while the 1984 level has increased by more than 12,000. Please explain these adjustments.

ANSWER: The following changes took place in the number of lump sum terminal leave payments shown in the FY 1984 and the FY 1985 President's budgets:

	FY 1983	FY 1984
FY 1985 President's budget	90,061	105,027
FY 1984 President's budget	93,374	96,577
Change	-3,313	+8,450

The decrease in FY 1983 separations resulted from an unexpectedly large number of short term extensions which occurred in the latter part of FY 1983 in conjunction with unprecedented retention. A portion of the 1983 short term extensions will expire in 1984 and thus account for some of the increased numbers of lump sum terminal leave payments in 1984. However, most of the increase in FY 1984 separation payments results from the belated recognition of the impact of large numbers of accessions in FY 1981. Initially, the FY-1984 estimate was based on historical trend data; new methodology being used reports anticipated EAOS by fiscal year, taking into account previous fiscal years' personnel gains and losses. It should be noted that lump sum terminal leave is payable at EAOS whether or not a person reenlists.

QUESTION: Further, explain why 1984 projections are a more accurate base than 1983 actuals for evaluating your 1985 requirements?

ANSWER: The number of separation payments projected for FY 1985 (and all other years as well) is based upon the end of active obligated service (EAOS) profile estimate of the active force for each year; therefore, a year to year relationship experience can not be applied... each yearly estimate is based on data pertinent to that year only.

PERMANENT CHANGE OF STATION (PCS)

QUESTION: Have any inflation assumptions changed since submission of your 1985 request? Please provide a list which shows additional costs and savings due to changed inflation assumptions by category.

ANSWER: Inflation assumptions have not changed since submission of the 1985 request.

QUESTION: Please explain the 1985 increase in officer training moves for technical skill development. Where will the increase be? How many officers are affected and what is the cost involved?

ANSWER: The increase of 286 officer training assignments over the level of FY-84 is directly related to the increase in officer end strength. New officer accessions, in support of the Navy's growth toward the 15 Battle Group Navy, require technical skill development in their designated specialities. The increase will occur in the Surface, Submarine and Aviation communities as well as in many of restricted line and staff corps communities where speciality training commences immediately after commissioning. The officer end strength increase in FY-85 requires an increase of 286 training moves which will cost approximately $941,000.

QUESTION: Please explain the increase in enlisted accession moves in relation to the categories on the chart on page I-08?

ANSWER: The increase in enlisted accession moves in relation to the categories on the chart is shown below:

Changes reflected on Chart on page I-08

	FY 1984	FY 1985	DIFF
Non-Prior Service Enlistments	68,341	69,875	+1,534
Male	(60,689)	(59,735)	(- 954)
Female	(7,652)	(10,140)	(+2,488)
Prior Service Enlistments	5,901	7,467	+1,566
Reenlistments	57,382	61,486	+4,104
Reserves	1,539	1,292	- 247
Navy Reserve (2/3 X 6) Program	12,010	15,758	+3,748
Officer Candidate Programs	2,899	3,755	+ 856
Returned From Dropped From The Rolls	8,052	9,720	+1,668
Gain Adjustment	6,989	-	-6,989
TOTAL GAINS	163,113	169,353	+6,240

Increases reflected in enlisted accession moves

	FY 1984	FY 1985	DIFF
USN Non-Prior Service Accessions	68,342	69,875	+1,533
USNR Non-Prior Service Accessions	12,010	15,758	+3,748
Accessions with 100% conversion to cost moves	80,352	85,633	+5,281
USN Prior Service Accessions	6,496	8,003	+1,507
USNR Prior Service Accessions	1,539	1,292	- 247
USN Prior USNR Service Accessions	1,506	1,999	+ 493
USN/USNR Other Accessions	8,052	9,720	+1,668
Total Prior Service/Other Accessions	17,593	21,014	+3,421
Less: Deserter Gains	-7,852	-9,299	-1,447
Plus: Officer Candidate Gains	+2,899	+3,755	+ 856
Adjusted Prior Service/Other Accessions	12,640	15,470	+2,830
Adjusted prior service/other accessions	12,640	15,470	+2,830
Percent that will travel in CONUS	X.9981	X.9981	X.9981
	12,616	15,441	+2,825
Percent that will be cost moves	X.9600	X.9600	X.9600
	12,111	14,823	+2,712
Adjusted prior service/other Accessions	12,640	15,470	+2,830
Percent that will travel overseas	X.0019	X.0019	X.0019
	24	29	5
Percent that will be cost moves	X.9737	X.9737	X.9737
	24	28	4

	FY 1984	FY 1985	DIFF
Accession with 100 percent conversion to cost moves	80,352	85,633	+5,281
Prior service/other accessions that will travel in CONUS at cost	12,111	14,823	+2,712
Prior service/other accessions that will travel overseas at cost	24	28	+ 4
Total Enlisted Accession Moves	92,487	100,484	+7,997

The above calculations show that accession cost moves increased more than enlisted accessions because of the change in mix of the category of accessions (i.e., prior service versus non-prior service accessions).

QUESTION: What is the average tour length of Navy officers and enlisted personnel in years 1982 through 1985? Please provide your response by those in the total active Navy and those in the career force.

ANSWER: Navy tour assignments are made to specific units or activities primarily on the basis of sea/shore rotation guidelines. The average unit/activity tour length does not directly relate to the level of PCS costs because of the large number of moves that are made between sea and shore duty stations in the same geographical area and therefore entail no or minimal PCS expenditures. Geographic area tours are more closely related to PCS costs. Average area tour lengths have been fairly constant over the past four years as shown below:

	FY 82	FY 83	FY 84	FY 85
Officer	32.2	33.2	33.7	32.1 (months)
Enlisted	41.5	43.3	39.7	38.8 (months)

The annual variations are a reflection of the levels of tour extensions and moves deferred to succeeding years due to fiscal constraints. Specifically, the high averages in FY83 and 84 directly reflect the increased voluntary tour extensions necessary to remain within funding controls and the low average in FY85 reflects the increase in moves required as result of tour extensions in FY84. The data base from which the average area tours are taken does not differentiate careerists from the total force and cannot be used to indicate average area tours for the career force.

QUESTION: Please explain the increase in total moves from 1984 to 1985 which is in excess of end strength increases. Please specifically address the increases in rotational and accession travel.

ANSWER: Navy's PCS request for FY85 represents an increase of 13,972 moves above the FY84 level. While not every type move shows an increased level, the total growth is greater than growth in end-strength and reflects a conscious effort to reduce the number of moves deferred from year to year. The increased level of rotational moves results from 6,200 rotational moves that are being deferred from FY84 into FY85 by voluntary tour extensions and assignment actions to remain within funding controls. The accession moves shown in the request are cost moves only and do not reflect the true relationship of actual personnel gains and losses to Navy strength. Bel~~ow is~~ a more complete view of necessary gain and loss requirements:

Accession	
Officer Cost Moves*	7,548
Officer No-Cost Moves	+1,061
Total Officer Accession Moves	8,609
Enlisted Cost Moves**	100,484
Enlisted No-Cost Moves	+ 619
Total Enlisted Accession Moves	101,103
Midshipmen Accession Moves	+1,311
Total Accession Moves	111,023
Separations	
Officer Cost Moves	4,782
Officer No-Cost Moves	+200
Total Officer Separation Moves	4,982
Enlisted Cost Moves	87,002
Enlisted No-Cost Moves	+2,787
Total Enlisted Separation Moves	89,789
Midshipmen Separation Moves	+296
Total Separation Moves	95,067
Total Accession Moves	111,023
Total Separation Moves	-95,067
	15,956
End-Strength Increase	-10,500
	+5,456

The 5,456 accession moves in excess of separation moves represent the impact that midshipmen and officer candidates have on accession move totals. Midshipmen and officer candidate move accounting includes two accession moves; one upon initial entry for training, and a second on commissioning as an officer.

Note: * Includes midshipmen and officer candidate moves upon Commissioning.

** Includes officer candidate moves upon entry into training.

SPECIAL PAY FOR PHYSICIANS AND DENTISTS

QUESTION: What is the average of pay above basic military compensation which is paid to each physician, dentist and optometrist? Please provide an average by category.

ANSWER: The average of pay above basic military compensation paid each category is as follows:

Physician	- $18,500
Dentist	- 9,500
Optometrist	- 1,200

SUBMARINE DUTY INCENTIVE PAY

QUESTION: According to the 5th quadrennial review of military compensation, submarine pay is paid to individuals before they are assigned to their first operational submarine duty. How many members are annually in this category? Please provide the numbers for ficsal years 1983 through 1985.

ANSWER: Submarine designated trainees paid submarine duty incentive pay are projected at:

	FY 1983	FY 1984	FY 1985
OFFICERS	773	748	750
ENLISTED	5500	5500	5500

QUESTION: What is the annual cost of this policy?

ANWSER: Submarine duty incentive pay annual costs are estimated at:

	FY 1983	FY 1984	FY 1985
MILLIONS OF DOLLARS	5.2	5.1	5.2

QUESTION: The QRMC questioned the practice of paying submarine pay in the above described area. Please provide the requirements for submarine pay in this area and specific justification.

ANSWER: Payment of submarine duty incentive pay to submarine designated trainees was authorized by the Military Pay and Benefits Allowances Act of 1980 (P.L. 96-579). It is required to bolster inadequate accessions by providing an incentive to increase the submarine duty volunteer rate. This provision has been very effective in inducing greater numbers of qualified personnel to volunteer for a submarine career, and in reducing attrition in the enlisted submarine training pipeline.

SEA PAY

QUESTION: Are Navy pilots serving at sea eligible for sea pay?

ANSWER: Navy pilots receive sea pay only when assigned to or physically embarked on a qualifying vessel. The typical shipboard-based pilot will not accumulate enough sea time to qualify for sea pay until the 8th or 9th year of service.

QUESTION: What percent receive sea pay in addition to either AOCP or ACIP?

ANSWER: Because of the three year minimum requirement for receipt of Career Sea Pay for officers and the fact that aviators move frequently on and off air capable ships and receive sea duty creditable for career sea pay purposes only when actually embarked, the Navy does not routinely maintain data reflecting the percent of aviators receiving the pay. However, a special analysis was conducted for the Fifth Quadrennial Review of Military Compensation which revealed that 8.9% of Navy pilots received sea pay during March 1983. It is assumed that all of these pilots were receiving ACIP at the same time. A further detailed analysis would have to be conducted to determine the number of AOCP recipients who draw sea pay.

QUESTION: What is the average value of sea pay for pilots and NFO's?

ANSWER: Over a 20 year career, the typical shipboard-based aviator will receive $16,530 in Career Sea Pay while accumulating approximately 8.5 years,of creditable sea duty time. Payments normally begin in the 8th or 9th year of service and are most intensive between 12 and 19 years virtually all of which is spent on sea duty.

AVIATION OFFICER CONTINUATION PAY (AOCP)

QUESTION: Please provide the Navy pilot and NFO inventory to authorization ratios for 1983 through 1985.

ANSWER: Within the context of AOCP, inventory to authorization ratios are most applicable to and have always been provided for the midgrade (03-05) officer. These ratios for the years requested are as follows:

MIDGRADE (03-05) AVIATORS

	PILOT			NFO			TOTAL		
	AUTH	INV	%	AUTH	INV	%	AUTH	INV	%
FY83	8324	7594	91%	3789	3710	98%	12113	11304	93%
FY84 (P)*	8310	7731	93%	3810	3954	103%	12120	11685	96%
FY85 (P)	8525	7853	92%	3999	4123	103%	12524	11976	96%

QUESTION: Considering that Navy NFO inventory to authorization ratio in 1982 was 103 percent of objectives, why is payment of AOCP necessary?

ANSWER: While overall (01-05) Navy NFO ratio was 103% in 1982, the midgrade (03-05) NFO ratio was 98% and represented the grade structure where AOCP was applied at that time. The Fifth Quadrennial Review of Military Compensation in reviewing AOCP concluded "...it is appropriate to extend AOCP to NFOs until inventories reach the point at which they are no longer needed to perform duties of other aviator positions. We believe an appropriate level for NFO inventory to authorization ratio would be about 110%." Additionally, while overall NFO inventory now matches requirements at the 0-3 level, shortages still exist in certain aviation communities. It is only those specific communities where the bonus will be applied in FY 1985.

QUESTION: In the FY 1985 budget, is the Navy planning to pay AOCP in a lump sum?

ANSWER: The FY 1985 budget did not provide for lump sum payment of AOCP. However, the QRMC Legislative Contingency Fund request separately submitted did request funds for lump sum payments in FY 1985. Navy considers lump sum payments to be a more efficient and cost-effective method of paying AOCP since the lump sum can be appropriately discounted and the program would not incur out-year anniversary obligations. If the QRMC Legislative Contingency Fund request is approved, the FY 1985 AOCP program will be paid on a lump sum basis.

* Projected

STATION ALLOWANCES OVERSEAS-HOUSING

QUESTION: Please explain the large increase in the rate between the original 1984 request and the current anticipated cost for 1984.

ANSWER: The large increase in the rate for overseas housing allowance adjusts for the failure of the estimate in the FY 1984 President's budget to capture large rate increase which occurred in late FY 1982 as a result of the phased implementation of Rent-Plus. The FY 1984 President's budget estimate was based on an average of FY 1982 actual rates for the entire year. This method did not give adequate weight to large rate increases in the fourth quarter of FY 1982, as FY 1983 actual costs have proven. The estimate in FY 1985 President's budget is based on an average of FY 1983 third and fourth quarter costs.

QUESTIONS: Considering the large increase between the budget request of 1984 and the current estimate and the lack of increase budgeted for between 1984 and 1985, is the 1985 requirement underbudgeted?

ANSWER: Overseas housing allowance rates are influenced by changes in foreign currency exchange rates vis-a-vis the dollar. It is not possible to accurately anticipate the effect of exchange rate fluctuations. Consequently, FY 1985 is based on FY 1984 assumptions and represents an estimate believed to be adequate for this allowance.

LEGISLATIVE PROPOSALS

QUESTION: Please provide the estimated cost in the military personnel, Navy, appropriation with new legislative proposals as submitted in the FY 1985 President's budget.

ANSWER: The military personnel, Navy, appropriation request submitted in the FY 1985 President's budget contained no costs for new legislative proposals. However, the new legislative proposals requested in the Department of Defense Legislative Contingency portion of the FY 1985 President's Budget, would, if approved, result in the following costs in the Military Personnel, Navy appropriation:

ITEM	AMOUNT ($ IN MILLIONS)
Enlisted Flight Pay (CREW)	$ 5.31
Enlisted Flight Pay (NON-CREW)	.09
Parachute Duty Pay	.21
Demolition Duty Pay	.27
Experimental Stress Pay	.06
Flight Deck Duty Pay	4.82
Toxic Fuels Pay	.04
Aviation Officer Continuation Pay	13.82
Two Hazardous Duty Pays (maximum of)	1.78
Certain Places Pay	10.05
Career Sea Pay	1.67
Responsibility Pay	.53
Proficiency Pay	11.50
Nuclear Officer Incentive Pay	40.54
Family Separation Allowance	14.72
Death Gratuity	1.60
Second Dislocation Allowance	.20
TOTAL	$107.21

COST OF END-STRENGTH INCREASE IN ORIGINAL BUDGET

QUESTION: What are the costs by line item associated with the increased end-strength request in the original FY 1985 budget?

ANSWER: The Air Force did not discretely program and price the 15,700 end strength increase when preparing the FY 1985 column of the FY 1985 President's Budget. The FY 1985 estimate was constructed in its entirety and considered the beginning strength of 594,500 (FY 1984 end stength) and the planned FY 1985 end strength of 610,200. The officer and enlisted accession levels were determined based upon estimated losses and the 15,700 end strength build. Total FY 1985 requirements were considered in the Air Force's program and pricing calculations.

The cost associated with the original end strength build in the FY 1985 budget are as follows:

($ in Thousands)

	OFF	ENL	SUBSIS	PCS	TOTAL
Basic Pay	$20,597	$60,119			$ 80,716
Ret Pay Accrual	10,401	30,661			41,062
FICA	1,425	4,028			5,453
BAQ	3,242	9,566			12,808
VHA	909	2,550			3,459
BAS/SIK	913		$8,042		8,955
Uniforms/Cloth	410	3,780			4,190
Separation Pay	-15,090	-1,952			-17,042
PCS				$8,079	8,079
TOTAL	$22,807	$108,752	$8,042	$8,079	$147,680

The negative amounts appearing in Separation Pay indicate that savings occur in this entitlement as a result of the end strength increase. If the end strength growth is reduced, losses would have to be increased by accelerating projected FY 1986 losses into FY 1985 by means of an early release program. As a result, this would increase the cost of separation payments in FY 1985.

The above amounts consider the 4% January 1, 1984 pay raise annualized in FY 1985.

COST OF END-STRENGTH INCREASE IN REVISED BUDGET

QUESTION: What are the costs by line item associated with the revised end-strength request?

ANSWER: For the revised budget, the costs by line item associated with the end strength increase are as follows:

($ in Thousands)

	OFF	ENL	SUBSIS	PCS	TOTAL
Basic Pay	$12,697	$21,119			$33,816
Ret Pay Accrual	6,401	11,261			17,662
FICA	889	1,478			2,367
BAQ	2,024	3,226			5,250
VHA	567	860			1,427
BAS/SIK	570		2,712		3,282
Uniforms/Cloth	-214	3,030			2,816
Separation	-14,927	-125			-15,052
PCS				3,079	3,079
TOTAL	$ 8,007	$40,849	$2,712	$3,079	$54,647

The above amounts consider the 4% January 1, 1984 pay raise annualized in FY 85.

AFFECT ON MAN YEARS IN REVISED BUDGET

QUESTION: How will man years be affected by the end-strength request in the revised budget?

ANSWER: Man years associated with the end-strength request in the revised budget are 3,523 (280 officers/3,243 enlisted) less than the original request.

DEVIATIONS FROM HALF MAN YEAR METHOD

QUESTION: Please explain any deviations from the half man year method to quantify downward end-strength adjustments.

ANSWER: Based on the early decision on the end-strength reduction the half man year method can be used to quantify downward strength adjustments.

LONGEVITY INCREASES

QUESTION: How many Air Force officers and enlisted men will receive longevity increases in FY 1985? What is the average increase by officer and enlisted?

ANSWER: Air Force personnel receive longevity increases at different intervals during their career depending on their year group (yearly, every two years, and every four years). The majority of the force is in the every two years longevity category, and therefore, approximately half of the force will receive a longevity increase in any given year. The monthly longevity increase will vary from $20 to $206 for enlisted and from $38 to $461 for officers.

PAY RAISE ANNUALIZATION

QUESTION: What part, if any, of the pay raise annualization figure is a result of increased end-strength request for fiscal year 1985? Please respond showing the average increase per officer and enlisted man-year?

ANSWER: The following provides the pay raise annualization and average per officer and enlisted that results from the end strength increase:

	MANYEARS	RATE	AMOUNT (IN THOUSANDS)
OFFICER	745	$333.93	$ 249,000
ENLISTED	5,103	140.68	718,000
	5,848		$ 967,000

The above manyears do not equal the total manyear increase from FY 1984 to FY 1985. The remaining increase in manyears results from annualization of the FY 1984 end strength.

CADET MAN-YEARS

QUESTION: The fiscal year 1985 average monthly strength as shown on page 7 for cadet strengths is decreasing from 1984 levels. Why have you included an increase in cadet man-years?

ANSWER: While the rounded cadet end strengths shown on page 7 appear to show FY 85 average strength slightly less than FY 84 (3 months .1 lower, 1 month .1 higher), there is actually very little difference in programmed end strengths. In addition, a 1-2 week earlier projected reporting date for the 1485 entering cadets in FY 85 resulted in the additional 33 manyears.

AVIATION CAREER INCENTIVE PAY - CAUSE OF INCREASE

QUESTION: What is causing the increase in requirements in pilots and other recipients of ACIP in FY85?

ANSWER: Air Force rated requirements will increase by 91 positions in FY85. Detail follows:

FY84-85 Air Force Requirements
Pilot/Navigator

	Pilot	Navs	
FY84	23,645	10,172	
FY85	23,893	10,015	
± Change	+248	-157	= +91

The primary reasons for the requirements increase are force structure changes. A breakout of requirements changes by aircraft type follows:

Detail

Aircraft	Pilots	Navigators	Reasons
B-1 (+1)	6	4	Initial Training
B-1	4		Initial Wing Staff
TR-1 (+4)	8	-	New Aircraft
KC-10 (+10)	30	-	New Aircraft
KC-10	11	-	Wing Staff/Training
C-135E (+1)	4	2	New Aircraft
E-3A (+1)	4	2	New Aircraft
C-5A (-8)	-32	-	Transfer to AFRES
C-5A	-	-60	Replace Navigation System
European Distribution System Aircraft (+14)	84	-	New Aircraft
F-4 (-42)	-52	-52	Transfer to AFR
F-16 (+48)	64	-	New Aircraft
F-16	28		Crew Ratio Increase
A-10	26		Crew Ratio Increase
EF-111 (+11)	12	12	New Aircraft
Fighter Training	31	-26	-F-4, -F-111, +EF-111
Airlift Training		-19	-C-5 Navs
Developmental, Test and Engineering Aircraft	20	-20	-F-4, -F-111, +F-16 +B-1
	+248	-157	+91 Net

This net increase in requirements for 91 rated officers, based on validated mission requirements, should not be confused with a modest growth ($1.9M) in the projected FY85 ACIP budget. The ACIP budget is based on total rated inventory. The ACIP budget is increasing because the number of rated officers in the Air Force is increasing, primarily as a result of very favorable retention. Besides retention, the inventory size is a function of several other factors including medical or professional disqualifications, and UFT (Undergraduate Flying Training) production rates. Air Force conducts an annual review of the inventory/requirements ratio and adjustments are made to UFT rates. The objective is to balance the inventory and requirements at the end of the FYDP. Long lead times (about 24 months) are required to train an Air Force pilot. This long training lead time and the need to maintain a relatively stable UFT production rate (and avoid the cost inefficiency of major fluctuations) dictates the need to manage the rated force inventory size over the long term (5 years).

CONTINUED USE OF ACIP

QUESTION: Since pilot retention is increasing and overall inventory exceeds authorization, what conclusions can be drawn about the continued requirement for ACIP?

ANSWER: The current Air Force aviator picture has changed dramatically in the past 5 years. Substantial improvement in retention and experience levels, an inventory properly aligned with wartime requirements, the best aviation accident rate in the history of the Air Force and improved combat readiness are all factors that describe the Air Force in 1983-84. These improvements can be attributed to several factors, but are due largely to Aviation Career Incentive Pay and increases to this program enacted by the Congress in 1980 and 1981. To reduce or eliminate ACIP at this point would be to undo the positive gains made in recent years.

The retention of aviators in 1979 was markedly different from today. The chart below compares the Cumulative Continuation Rate for 6-11 YOS AF pilots from FY78-FY83.

FY	CCR
78	38%
79	26%
80	42%
81	54%
82	68%
83	78%

The 26% CCR in FY79 vice the 78% CCR for FY83 provides the perspective for the recent volatile changes to aviator retention. FY84 continuation rates remain quite high. However DoD analysts predict a moderate downturn in retention based on historically reliable economic indicators. These indicators are: the unemployment rate, pay comparability gap, airline hiring, and the Consumer Price Index. Preliminary statistics for the first part of FY84 already indicate this retention decline. In fact the FY84 rate is expected to revert to the FY82 rate (about 70%). Thus, the first assumption of the question, "... pilot retention is increasing...", is technically incorrect. The current high retention is the "top of the mark." Declines are beginning and forecast to continue based on economic indicators.

It is true that pilot inventory exceeds authorizations; however, "authorizations" are peacetime ceilings that reflect budget constraints on manpower ceilings and available flying hours. The Air Force adheres to these authorizations for peacetime operations. However, given the long lead-time to produce pilots, the Air Force must calculate its wartime inventory by the combat scenarios in the Defense Guidance. These wartime requirements are larger than peacetime authorizations. Inventory is very closely aligned with these requirements. This is true in the aggregate sense as well as each individual budget category:

Air Force Requirements vs Inventory*
(Feb 84)

Budget Category	Requirement % of Total	Inventory % of Total	Difference
Force	42.4%	43.5%	+1.1%
Training	14.1%	13.9%	-0.2%
Advanced Students & Transient	7.1%	7.6%*	+0.5%
Staff			
- Flying	12.7%	9.3%	-1.0%
- Non-Flying	13.0%	14.6%%	+1.6%
PME/AFIT	1.8%	2.0%	+0.2%
Support	8.9%	9.1%	+0.2%

* Inventory includes both advanced students and transients

This chart shows the extremely close match of the current inventory distribution to the aviator requirements structure.

The management objectives of the rated force are to balance inventory and requirements through the Five Year Defense Plan (FYDP). Many factors such as changing retention patterns, or modifications to the aviator requirements are considered. Undergraduate Flying Training (UFT) production is reviewed and adjusted to achieve this FYDP equilibrium of inventory and requirements. In May 84 UPT and UNT were adjusted downward by 1200 and 500 positions respectively over the FYDP to achieve this balance. Five year estimates of economic factors, hiring in a deregulated airline industry and the emotional and personal factors that enter into the retention decision of aviators are difficult. For that reason, the inventory vs requirements ratio is reviewed annually and appropriate adjustments made to UFT rates. It is important to remember that the military requirement for aircrews can increase dramatically overnight resulting in a significant shortfall. The ability to produce pilots takes about 2 years.

As to the specific question asking for conclusions about the continued need for ACIP, we offer the following:

- ACIP is cost effective
- Reductions to ACIP will result in costs far in excess of savings, reduce experience levels, and decrease combat readiness
- ACIP fulfills its Congressionally-defined objective as a career incentive pay
- The current ACIP should be retained in its present form because it has proven to be a cost effective method for retaining experienced aviators. To modify this system after ten years of proven effectiveness would be perceived as a breach of contract by the aviator community and an adverse retention backlash would develop.

ENGINEERING AND SCIENTIFIC BONUSES REQUIREMENTS

QUESTION: Currently the Air Force is the only service to pay engineering and scientific bonuses. What is the requirement for these bonuses for the Air Force?

ANSWER: In FY 79 the Air Force had an aggregate engineer deficit of 1200 and we were experiencing dramatic shortages of engineers with 4 to 12 years service. One of the programs created to solve these problems was the engineer and scientific bonus implemented in September 1982. Initially the following disciplines were eligible: Electrical, Aero/Astro, Mechanical, and Architectural engineering. Since that time Architectural engineers were deleted (no new contracts offered) effective October 1, 1983 and Mechanical, Aero/Astro engineers were discontinued May 1, 1984. Although we continue to experience a shortage of electrical engineers, and must continue paying the bonus to this discipline, the aggregate shortage will be eliminated by the end of FY 84. One of the factors contributing to this improvement has been prudent judgment in the management of the bonus program.

ENGINEERING AND SCIENTIFIC BONUSES INCREASE IN PAYMENTS

QUESTION: What is causing the increases in the number of payments in FY 1985?

ANSWER: The Engineering and Scientific Bonus was implemented in September 1982. For the great majority of those who have signed contracts, the commitment and hence the payments were for four years. Thus almost all those who have accepted a commitment will still be receiving an anniversary payment in FY 85. We also expect some additional new contracts (electrical engineers only) which results in the increase in the number of payments.

NUMBER OF PAYMENTS IN REVISED BUDGET FOR E&S BONUSES

QUESTION: How are the number of payments affected by the reduced end-strengths as supplied in the revised budget?

ANSWER: The number of payments for the E&S bonus is not affected by the reduced end-strengths in the revised budget. Since this bonus is payable only to officers with at least four years of commissioned service, adjustments to end strength and hence accessions have no impact on the number of bonus payments.

AFFECT OF REVISED BUDGET ON MEDICAL, DENTAL & AVIATOR STRENGTHS

QUESTION: What is the affect of the revised budget on medical, dental, and aviator strengths?

ANSWER: FY85 revised budget impacts are as follows:

Medical and Dental	-1292 military (includes -116 doctors and -22 dentists)
Aviators	-86 military (includes -37 pilots and -49 navigators)

EFFECT OF REVISED BUDGET ON PAYMENT OF SPECIAL INCENTIVE PAYS

QUESTION: How will any decreases affect payment of special and incentive pays for these specialists?

ANSWER: The effect of revised end strengths in Medical and Dental Corps and Career aviators to the payment of special and incentive pay are:

A reduction in Medical corps strengths in FY 1985 by 116 positions corresponds to a budget reduction in special pay of approximately $1.86 million ($16000 per physician), assuming these reductions are new medical officer accessions.

A dental officer reduction of 22 positions would amount to a reduction of $26 thousand ($1,200 per dentist), again assuming a reduction of newly accessed dental officers.

In FY 1985, if the Air Force reduces its programmed inventory of aviators by a total of 86 (37 pilots and 49 navigators with less than two (2) years of service), the Aviation Career Incentive Pay savings would be $129 thousand ($1,500 per aviator).

SELECTIVE REENLISTMENT BONUS - INCREASE IN ACCELERATED PAYMENTS

QUESTION: What is causing the increase in accelerated payment in FY 1985?

ANSWER: Individuals are given accelerated Selective Reenlistment Bonus payments for two reasons, unusual financial hardship or early separation for involuntary reasons not due to misconduct. Only airmen who have installment payments still due to them may receive accelerated payments. Since the Air Force began the combination lump sum/installment payment method in January 1982, each succeeding year adds to the population of people who are due installment payments. This growing population means that the accelerated payments of each year will probably be higher than the year before, hence the Air Force's estimate of $2 million for FY 85 versus $1.5 million for FY 84.

YEAR TO YEAR REDUCTIONS IN SRB

QUESTION: Considering that a certain percent of bonus recipients failed to fulfill the obligations associated with receiving the SRB, why are there no reductions in the number of payments from year to year for current and prior years?

ANSWER: There is no reduction in payments for two reasons. First, we did not have sufficient data available to properly estimate this reduction and second, the number and amount were insignificant when compared to the size of the outyear installment payments obligation. The Air Force began the 50 percent lump sum--50 percent installment payment method in January 1982. By December 1983, when we prepared the Fiscal Year 1985 budget, relatively few recoupments had occurred from bonus recipients paid under the 50/50 method. The vast majority of recoupments were from lump sum recipients and these had no effect upon outyear installment payments obligations. For example, in Fiscal Year 1983, 410 airmen separated prematurely for recoupable reasons. Only 140 were paid under the 50/50 method. When we compared 140 against a population of nearly 44,000 bonus recipients paid under the 50/50 method between January 1982 and October 1983, we decided outyear adjustments of obligated installment payments would be insignificant.

BASIC ALLOWANCE FOR SUBSISTENCE

QUESTION: What has caused the large increase in BAS since 1983?

ANSWER: The growth in BAS results primarily from three factors. First, the end strength growth in FY 1984 and FY 1985 caused a significant increase. Second, improved retention has caused the percentage of the force that are sponsors to increase. As members become sponsors, they automatically become entitled to BAS. Last, the approved grade structure increase in FY 1984 and FY 1985 results in a greater percentage of the total enlisted force being concentrated in the grades of Master, Technical and Staff Sergeants. Because the percent that receive BAS increases with grade, the grade structure increase causes an increase in the overall percent of the force that receives BAS.

SUBSISTENCE IN KIND

QUESTION: Considering the decrease in FY84 execution of subsistence in kind, why are you budgeting for an increase in FY 1985?

ANSWER: The FY 1984 and FY 1985 columns of the FY 1985 President's Budget were prepared at a time when the Air Force had only two months of FY 1984 execution data. Therefore, the FY 1985 direct subsistence in kind (SIK) requirements reflect an increase (+$5.3 million) over FY 1984 because of an increase (+1,037) of the total enlisted personnel entitled to be subsisted in dining halls plus other SIK requirements. This increase was triggered by an end strength increase of 10,467 enlisted end strength. In addition, there are increases in FY 1985 over FY 1984 because of increased rates caused by inflation and anticipated Stock Fund price increases.

The Air Force had insufficient data to project SIK requirements when the President's Budget was prepared; however, after seven months of execution data projected for the remainder of FY 1984, there is a decrease in SIK funding requirements of $3.0 million. At the same time the Air Force, as in FY 1983, is experiencing a funding shortfall (-$8.7 million) in Basic Allowance for Subsistence (BAS). The SIK overage is required to partially offset the BAS deficit, and it is anticipated this change in requirements will have the same impact on FY 1985. Accordingly, all of the requested financing is required in the Subsistence of Enlisted Personnel account.

MEALS READY TO EAT

QUESTION: The cost to the Army of a case of MREs is $44.33, why is the cost to the Air Force $50.81?

ANSWER: The Air Force budgeted $50.81 per case for MREs based upon guidance from the Office of the Secretary of Defense (Comptroller). This was a late change during the budget review cycle, and it is the understanding of the Air Force that the $50.81 was the rate that would be charged for a case of MREs in FY 1985.

PERMANENT CHANGE OF STATION

QUESTION: Please explain the increase of 5,000 PCS moves between 1983 and 1984.

ANSWER: The net increase of 4,914 PCS moves is mostly related to increased rotational and separation moves. Rotational move increases are driven by an increase in overseas end strengths from FY 83 to FY 84. Separations are higher in FY 84 because the AF does not expect the retention rate to be as high in FY 84 as experienced in FY 83. The following chart reflects the changes in PCS moves between FY 83 and FY 84.

	FY 83	DELTA	FY 84
ACC	77,435	-2,274	75,161
TNG	18,718	+390	19,108
OPER	34,000	+355	34,355
ROT	91,985	+2,546	94,531
SEP	64,908	+3,962	68,870
UNIT	537	-65	472
	287,583	+4,914	292,497

ACCESSION TRAVEL

QUESTION: Your enlisted accession move justification identifies 8,150 moves above FY 1984 levels but your request includes 9,285 additional moves. Please explain the apparent contradiction.

ANSWER: It is correct that the increase in FY 85 enlisted accession moves is 9,285 over FY 84. In the Schedule of Increases and Decreases the Air Force identified only the primary drivers for the enlisted accession increase which total 8150. There are additional categories which make up the 1135 difference between 8150 and 9285. They are listed below:

Recall Reserves	+ 19
Women Enlistees	+ 450
Officers Training School	+ 592
0-90 Day Reenlistees	+ 74
	+1135

OVERSEAS ACCESSION TRAVEL

QUESTION: What percent of accession travel by officer and enlisted will be for overseas travel?

ANSWER: The Air Force plans to send approximately 5.8% of its officer accessions and 21.6% of its enlisted accessions overseas in FY 85. The number of officer and enlisted overseas accessions are relatively the same in FY 84 and FY 85. The Air Force continues to reduce costs by sending "less expensive" accessions overseas into positions which do not require advanced skill/training levels and where readiness is not adversely impacted by the presence of less experienced people.

TRAINING TRAVEL

QUESTION: Your number of pilots and navigator graduates is declining by 194 in FY 1984. However, your ACIP requirements are increasing. Please explain this situation:

ANSWER: The actual number of USAF pilot and navigator graduates produced in FY1983 was 2704 (1780 pilots and 924 navigators). The programmed production of pilot and navigator graduates for FY 1984 is 2850 (2000 pilots and 850 navigators). This represents an increase of 146 pilot and navigator graduates from FY 1983 to FY 1984, not a decrease of 194 as suggested in the question. While it now appears that we may graduate slightly fewer pilots and navigators than we programmed in FY 1984, the change from FY 1983 to FY 1984 will still be an increase, not a decrease.

The Air Force manages the rated inventory to match rated requirements at the end of the Five Year Defense Plan (FYDP). UFT (Undergraduate Flying Training) rates are reviewed annually along with the inventory/requirements ratio and appropriate adjustments are made to the training program. Preliminary budget review ongoing at the present time indicates a reduction to UFT rates is appropriate. Current retention rates are high (although modest declines are beginning to occur) and the inventory is very closely aligned with requirements. Consequently, the Air Force plans to reduce pilot production to 1800 per year and navigator production to 700 per year. This will result in a total reduction of 1700 over the FYDP.

The requirement for ACIP funding depends upon the size of the entire rated inventory, not the number of new pilot and navigator graduates. Different annual retention rates affecting an inventory of over 30,000 aviators can create much larger changes in inventory size than the relatively small, annual production of new pilots and navigators. Since the ACIP increases of 1980 and 1981, pilot and navigator retention rates have steadily risen to the current high levels. When these retention rates are high and losses are heavily curtailed, the size of the inventory can grow even with a reduction of new pilot and navigator graduates. For example, the number of new graduates could be reduced from year to year, but as long as production exceeds losses the inventory will continue to grow as will the ACIP budget. A $1.9M increase in the ACIP budget is a small price to pay for the significant savings that will result from these substantial reductions in UFT production.

ROTATIONAL MOVES

QUESTION: Where will the 4,891 additional overseas end-strength be assigned?

ANSWER: As of the Revised FY85 President's Budget, the Air Force has programmed an additional 4726 active military authorizations overseas in FY85.

Locations	Personnel
East Asia/Pacific	1730
Western/Southern Europe	2929
Africa, Near East/ South Asia	46
Western Hemisphere	21
	4726

INFLATION ADJUSTMENTS

QUESTION: Have there been any inflation adjustments since submission of the FY 1985 budget? What impact will these have on your funding requirements?

ANSWER: There have not been any inflation adjustments since the FY 1985 budget was submitted.

END STRENGTH

QUESTION: Using the plans in 1980, 1981, 1982, 1983, 1984 and 1985; what would have been the end strengths permanently assigned ashore to European NATO countries in each five year plan?

ANSWER: Data on European NATO strength projections contained in each year's Defense Manpower Requirements Report are shown below.

European NATO Strength Projections
(in 000's)

President's	Fiscal Year					
Budget	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85
FY 1981	309.0	314.0				
FY 1982		318.2	318.2			
FY 1983			315.6	320.2		
FY 1984				321.5 1/	326.3 2/	
FY 1985					322.4	326.4

1/ This strength revised to 316,900 in June 1983
2/ This strength revised to 324,500 in June 1983

QUESTION: If the Congress had provided the requested strengths in fiscal years 1981-1984, what would be the estimated cost of the FY 1985 manpower budget?

ANSWER: It would be impossible to hypothesize with any degree of accuracy for years prior to FY 1984 what the FY 1985 manpower program (and therefore the budget) would have been if Congress had provided the strengths requested. If however, Congress had approved the FY 1984 strength of 2,164,700, the FY 1985 requested strength of 2,213,000 would have cost about $52 billion.

AVERAGE COST OF MILITARY PERSONNEL

QUESTION: Regarding the average cost data as supplied for the record in conjunction with the April 4, 1984 hearing, was the value of housing of members who have quarters provided included in the calculations?

ANSWER: No.

QUESTION: What percent of military members have quarters provided? Please provide your response by service, officer or enlisted, and married or single.

ANSWER: On an overall basis, about 51 percent of military personnel are provided quarters. The break by Service, by officer and enlisted follow:

	Army	Navy	MC	AF	Total
Officers	32.9	19.7	31.4	23.4	26.4
Married	30.4	20.1	29.3	27.8	27.1
Single	39.7	19.0	37.0	9.5	24.6
Enlisted	57.8	53.3	67.0	50.8	55.6
Married	31.0	20.0	24.1	37.4	29.8
Single	88.7	81.1	91.4	68.7	82.1
Total	54.4	49.1	63.4	45.8	51.4
Married	30.9	20.0	25.1	35.2	29.3
Single	84.4	76.5	88.8	62.2	77.3

The above figures were derived by considering that married and single were synonymous with the categories of "with dependents" and "without dependents".

QUESTION: What is the value of BAQ saved in the FY 1985 budget because quarters are provided? Please respond showing savings for officers and enlisted.

ANSWER: On a manyear basis, an estimated 81,293 officer and 1,019,823 enlisted will occupy government furnished quarters during FY 1985. If the value of these quarters (family housing and barracks) were priced at the average BAQ rate applicable to the grades occupying such quarters the total would approximate $2,722 million, as follows: (Dollars in Millions)

	Officers	Enlisted	Total
Implied BAQ Savings	$387	$2,412	$2,799
Less Partial & Inadequate Housing Payments	-3	-74	-77
Implied Value of Housing	$384	$2,338	$2,722

QUESTION: What percent of military living on the economy receive housing compensation in addition to BAQ? Please respond by service, officer or enlisted, and married or single.

ANSWER: In addition to BAQ military personnel are entitled to a variable housing allowance in the CONUS or a housing allowance overseas when housing costs exceed certain parameters. We do not have the capability to break these costs by married or single. The percentages follow:

	Army	Navy	MC	AF	Total
Officers	84.7	96.2	89.4	93.5	91.1
Enlisted	87.1	94.9	87.9	94.5	91.6

PAY RAISE CALCULATIONS

QUESTION: I understand that one of the greatest factors in cost of living increases throughout the 1970s and into the 1980s has been housing costs. In theory, because of the link of pay raises to private sector cost of living, has the increase in Basic Pay been an overcompensation and that of BAQ an undercompensation? In your response please include the non-housing related cumulative percentage increase in the cost of living from 1972-1983 and 1980-1983.

ANSWER: Yes, housing cost growth was a significant factor in cost of living increases throughout the 1970s and into the 1980s. Between 1972 and 1983, the shelter component of the Consumer Price Index (CPI) increased 156 percent, while the CPI, less shelter, increased only 131 percent. The increase in the overall CPI was 138 percent. Clearly, housing costs increased greater than overall prices and was a major contributor to the rapid inflation of the past decade. It is not true, however, that military pay raises are linked to private sector cost of living, and therefore there is no basis for the assertion that the increase in basic pay has been an overcompensation and that of BAQ an undercompensation. As a matter of fact, both basic pay and BAQ failed to keep pace with inflation over the period from 1972 to 1983. The increase in basic pay was 102 percent and the increase in BAQ was 112 percent, both far below the increase in the relevant component of the CPI of 131 percent and 156 percent, respectively. Between 1980 and 1983, the CPI, less shelter, increased 20 percent. The increase in basic pay during this period was 24 percent, but it must be remembered that large catch-up increases were made to make up for pay caps during the 1970s. As stated previously, the increase in basic pay was far less than the increase in CPI over the entire period from 1972 to 1983.

QUESTION: Has the Department considered or proposed legislation to link the BAQ increase to changes in the housing CPI, and Basic Pay increases to the difference in private sector wage increase, with an offset for housing related increases?
ANSWER: No. The Department has proposed that VHA be increased by the housing component of the CPI, but that BAQ continue to be increased as part of the annual military pay raise.

QUESTION: Would this present a more equitable method for calculating annual pay raise adjustments?
ANSWER: No, it would not be more equitable. In a period of low inflation, such a system might work fairly well. However, during a period of rapid increases in housing costs, such as during the 1970s, this system would result in little or no increase in basic pay, thus automatically reducing all of the pay components directly linked to basic pay, such as future retired pay, reenlistment bonuses, etc. It is both illogical and inequitable to penalize arbitrarily, for example, military members' retired pay because of rapid housing cost growth.

PAY COMPARABILITY

QUESTION: Dr. Korb, in your testimony on April 4, 1984, you stated military pay is now fair. Why then have you requested increases which will exceed the cost of living?
ANSWER: Our military pay raise request is based upon a consideration of private sector wage growth, not cost of living. We believe that this approach is fair and equitable. We believe that military personnel should share the burden with their fellow citizens when inflation is eroding real wages, but likewise they should also share in the real wage growth and increase in standard of living that results when pay increases exceed inflation. It has become popular in some quarters to base military pay raises on inflation now that inflation has been sharply reduced to the point that workers are enjoying real wage increases. Such advocates were silent during the 1970s when military pay failed to keep pace with inflation or private sector wage growth. Obviously, military pay levels would now be much higher had military pay raises been linked to inflation.

QUESTION: Why is it necessary to increase other areas of military compensation such as special and incentive pays?
ANSWER: Increases in special and incentive pays--including enlistment and reenlistment bonuses--are justified to maintain adequate levels of manning in certain duties that require extensive training and higher levels of skill, such as aviation and nuclear

submarine operations; where the hazards are unusually high in peacetime, such as diving and demolition duties; where the duties are arduous, such as the combat arms; where sustained performance for long periods of time is required by duty, such as at sea; or where persistent manpower shortages exist, such as electronics technicians. Rather than raise the base levels of compensation to encompass these special situations, the system of special and incentive pays is a cost-effective method for dealing directly with a specific manpower problem.

QUESTION: What were pilot continuation rates LOS-6-10 for FY 1983? Please respond by services and the number of aviators in this category.

ANSWER: The data follow; they are consistent with comparable data provided to the QRMC. These are cumulative continuation rates, not retention rates. They show the probability of a pilot completing 10 years of service provided that FY 1983 retention rates continued unchanged.

Service	Pilot Continuation Rate	Number of Pilots, LOS 6-10
Army	.608	2,081
Navy	.520	2,565
Marine Corps	.496	2,245
Air Force	.801	6,013

QUESTION: What was the airline hiring of pilots in FY83?

ANSWER: Airline hiring has shown substantial increases over recent years. Calender year 1983 hires were 3001 pilots. This number represents new hires only -- not rehires from diminishing furlough pools. These 3001 pilots were hired by carriers operating jet aircraft; thus, smaller commuters or propeller carriers were not included. The vast majority of new hires (65-75%) are typically military trained pilots.

The following chart shows the most recent hiring information available over the 12 month period April 83 thru March 84:

AIRLINE EMPLOYMENT ACTIVITY
APR 83 - MAR 84

AIRLINE	NEW HIRES
People Express	462
Piedmont	230
Northwest	181
American Trans Air	127
Evergreen	124
America West	120
Southwest	119
Federal Express	117
US Air	113
Northeastern Int'l	107
National	103
Orion	100
Alaska	94
Frontier Horizon	87
Global Int'l	81
Republic	81
New York Air	81
Air One	62
American Int'l	62
Empire	62

Midway	56
Pacific Express	48
Others	628
Total	3245

Over the 12 month period shown, jet carriers have hired 3245 new pilots. In addition, 1878 former airline pilots have been recalled for a total increase in airline pilot activity of 5123. These figures do not include approximately 400-500 new hires by Continental (Continental data is "close-hold" by the company and therefore above figure represents an estimate only. However Continental has been aggressively recruiting DoD pilots during 1984).

New hires for April and May 1984 were 555 and 567 respectively -- the highest monthly hires since Jan 1979. Estimates are that calendar year 1984 new hires will be well over 4000. Although a large portion of recent new hires have been with the smaller national or regional carriers, many of the major national or international carriers are active (American, U.S. Air, Northwest Orient, Federal Express, Piedmont, Delta, Eastern, and United).

QUESTION: What is the projected annual hiring for 1984-1990?

ANSWER: Historically, airline hiring occurs in sprees of about 10,000 spread over three to four years. It appears that one such period began the last half of FY83. Based on the historical patterns and the new hires for the first eight months of FY84, we predict the following: FY84: 4500 hires; FY85: 3000 hires; and FY86: 2500 hires. Making predictions beyond FY86 is not feasible. Deregulation has made large changes in this industry the norm.

A major change in hiring patterns with regard to the age of new pilots may be forthcoming. Because of the increased hiring by the somewhat smaller regional carriers, new opportunities for older, more experienced pilots are possible. These carriers are competing for the highly experienced military pilot (age 35-45) for first officer and captain positions. This will create pressure on the retirement plans of more senior military flyers, a point DOD is watching with concern.

QUESTION: The QRMC report states that the Air Force can only meet its current operational commitments with its current inventory level. Is this accurate? How many nonflying pilot positions are required to meet current operational commitments?

ANSWER: The statement that "the Air Force can only meet its current operational commitments with its current inventory level" is accurate.

The current pilot and navigator inventory levels, which are virtually equal to requirements, are necessary to meet the current operational commitments based on combat scenarios contained in the Defense Guidance. In wartime, those aviators now serving in non-aviator billets (Professional Education and Support) would be used to meet wartime surge requirements and to provide replacement aircrews. The need to have these aviators immediately available is dictated by the long lead time (up to 24 months) required for training.

Aviators in nonflying positions serve in one of three areas: Staff, graduate education, or support career fields. These are described in more detail below:

Rated Staff: Approximately 57% of the rated officers filling nonflying positions are in rated staff assignments requiring aviation expertise. The need for each of these individual staff positions is validated through an annual review process that determines the requirement for both the position and for rated expertise. These positions form a major portion of the planning, programming, supervisory and command structure of the Air Force flying units. This entails work that must be performed by experienced aviators.

Air Force Institute of Technology (AFIT) and Professional Military Education (PME): Aviators in the AFIT/PME categories are in full time training programs. Aviators in AFIT are enrolled primarily in a graduate education program that is preparing them for a specific follow-on assignment.

Selection for either AFIT or PME is accomplished through competitive boards which evaluate and select individuals for attendance based on their military record, academic background and potential utilization area. While in AFIT or PME, aviators are not flying. These individuals remain, however, key wartime surge resources. They are the most available source of aviators to immediately meet the wartime surge requirements. These officers are highly experienced aircrew members qualified for quick rturn to aviation duties if needed for war.

Rated Supplement: The policy of assigning aviators to support officer career fields exists for two reasons. Most importantly, these aviators are part of a bank of experienced flyers that are required to meet wartime requirements. Secondly, these aviators enhance the effectiveness of the Air Force by being catalysts in integrating operational and support functions. Similar to officers in AFIT/PME programs, these individuals are highly experienced aviators. This enhances their job performance in the support career fields and ensures only short training periods to requalify for operational flying duties.

The data and charts provided in the Report to the Congress on Aviation Career Incentive Pay (May, 1984) show the shifts from peacetime force distribution to a wartime posture. The Report focused in particular on increases in force and "command and staff" (which is a term synonymous with the USAF's "rated staff"). We refer the reader to that report for a discussion of this transition.

It is important to note that staff pilots are absolutely essential to plan, organize, and execute Air Force missions. In most cases these pilots are not permitted to fly while assigned to staff positions. This is prudent management of expensive flying hours to ensure the squadron flyers maintain maximum proficiency.

The current inventory of pilots is very closely aligned with requirements (0.8%) overage). There is not a pilot surplus. The current favorable retention rates permit lower pilot training rates and the cost avoidance associated with lower UPT rates.

The Defense Guidance, the basis of the requirement and inventory of Air Force rated officers, does not provide for a major "force build" to react to hostilities. That is, "forces-in-being" will be used to surge to wartime levels and replace combat casualties. Increased production rates of aircraft would cause an increase in the requirements for aircrews. It is important to note that 24 months are required to recruit and train a pilot -- an inexperienced pilot. This long lead time precludes maintaining a reduced inventory and then training new pilots as replacement aircrews are needed.

We offer the following with regard to the specific question, "why it is necessary to maintain ACIP in its present form?"

- ACIP is cost effective.
- Reductions to ACIP will result in costs far in excess of savings, reduce experience levels, and decrease combat readiness.
- ACIP fulfills its Congressionally defined objective as a career incentive pay.
- The current ACIP should be retained in its present form because it has proven to be a cost effective method for retaining experienced aviators. To modify this system after ten years of proven effectiveness would be perceived as a breach of contract by the aviator community and an adverse retention backlash would develop.

QUESTION: What is the authorization and inventory of 0-6 pilots and navs by service for FY 1982-1990?

ANSWER: The tables below project the best estimates for all aviators for this time period. However, it should be noted that the "authorization" figures are peacetime operational flying activities; i.e., they represent "what we can afford to buy" for any given year, taking into account budget restrictions, manpower ceilings, and authorized flying hours. These data should not be confused with wartime requirements, for there is no possibility or intention that peacetime authorizations could ever fulfill wartime needs.

Defense planning categories are discussed in detail in the Manpower Requirements Report, FY 1985, Vol. III, Force Readiness Report, transmitted to the Congress in February, 1984. Pages I-6 and 7, "Manpower counting" describes the two categories in use. These are:

o Wartime Manpower Structure Requirement, which is the full manning of all units for the wartime scenario (i.e., what is needed by each unit to perform its wartime mission).

o Programmed Manning is that fraction of the Wartime Manpower Structure that incorporates adjustments resulting from fiscal constraints, manpower ceilings, achievable inventory, accession and separtion predictions, available flying hours, etc. Thus programmed manning is a smaller number than Wartime Manpower Structure and shows the spaces that will actually be filled. The term is synonymous with:

Army: Force Structure Allowance
Navy: Distributable billets
USMC: Authorized Strength Report
USAF: Force Structure Authorizations

The "authorizations" shown below are all estimated Programmed Manning figures, and it should be understood that overages in senior grades are maintained to assure wartime manning in some categories, such as aviation (it is not possible to procure experienced colonels/captains directly from civilian life through the draft). These data do not suggest that the total number of 0-6s exceeds the total numbers of 0-6s authorized; they do not. What they do show is the rated aviation subset, implying that certain support fields have fewer 0-6s than wartime requirements would show are needed. The data follow.

Fiscal Year	Inventory	Authorizations (Programmed Manning)	Percentage
		Army	
1982	304	109	279%
1983	320	109	294
1984	331	109	303
1985	317	109	291
1986	335	111	302
1987	358	112	320
1988	381	115	331
1989	381	115	331
1990	381	115	331
		Navy[1]	
1982	900	774	116%
1983	885	748	118
1984	810	744	109
1985	752	746	101
1986	722	749	96
1987	723	749	96
1988	772	749	103
1989	822	749	110
1990	868	749	116
		Marine Corps[1]	
1982	175	188	93%
1983	162	188	86
1984	180	188	96
1985	180	197	91%
1986	180	198	91
1987	185	198	93
1988	185	198	93
1989	185	198	93
1990	185	198	93
		Air Force[1]	
1982	2948	1051	281%
1983	2863	1056	271
1984	2764	1044	265
1985	2768	1046	265
1986	2768	1041	266
1987	2768	1038	267
1988	2768	1036	267
1989	2768	1036	267
1990	2768	1036	267

[1] Navy, Marine Corps and Air Force data include navigators and Naval Flight Officers as well as pilots. Army data do not, as the Army has no navigators.

The reader should note that not all O-6s receive ACIP. In the Air Force, about 55% of O-6s receive ACIP on either a continuous or "when actually flying" basis. In the Army, less than 50% (about 30%) receive ACIP on some basis. Also attached for general information is a sample of the duties that non-flying colonels in the Air Force perform.

Rated Colonels in Nonflying Positions

1. Director, F-15 Systems Project Office, Aeronautical Systems Division (ASD), Wright-Patterson AFB, OH: The current director is a command pilot with close to 5,000 flying hours. His rated experience - including a combat tour in Vietnam - is a must in this position. He must have firsthand knowledge of combat tactics. Must visit F-15 flying organizations and interface with squadron pilots to understand successes and failures of his project's activities.

2. Deputy Commandant for the Cadet Wing, United States Air Force Academy: This individual, a command pilot, is responsible for training and supervising the 4500 member Cadet Wing and a staff of 50 officers. Over 70% of the last graduating class at the Academy went to flight training. Thus, he and his staff have a direct and long term influence on the attitudes of future Air Force officers.

3. Combat Support Group Commander, Carswell AFB, TX: This officer plans and monitors support required to sustain a SAC wing, consisting of B-52's and KC-135's, and an Air Force Reserve F-4 Tactical fighter wing. His flying background is instrumental to the accomplishment of this unit's flying mission. He is responsible for an annual budget of $12 million. In addition to providing air field management, this officer is also responsible for structural and ground maintenance; base firefighting; and security and law enforcement for a community equivalent to a mid-sized city.

4. Air Liaison Officer, US Army 5th Corps, Frankfurt, Germany: This officer commands a tactical air support operations group composed of 40 rated officers and 220 support personnel. He is the advisor to the US Army 5th Corps commander on the employment of tactical air power. It is essential the Air Liaison Officer have a complete grasp of available air assets, capabilities, tactics and operations. His advise to the Corps Commander will have a direct impact on the outcome of any corps engagement.

5. Director of Fighter and Reconnaissance Requirements, HQ Tactical Air Command, Langley Air Force Base, Virginia: The TAC officer that establishes the Statement of Need for new weapons systems. He must have first hand knowledge of current fighter/reconnaissance capability and determine what improvements are required to win in aerial combat. He actively interfaces with aviation research and development, priviate industry, and the Air Force Systems Command to develop and acquire the most combat capable systems possible.

6. Director, Tactics, Special Operations and Combat Control, HQ Military Airlift Command, Scott AFB IL: The incumbent directs MAC Air Special Operations Forces in both exercises and actual combat (overt and covert) operations. Responsible for developing tactics to be used by special operations forces. Rated experience is a "must" in the job.

7. Military Airlift Command Liaison Officer, Organization of the Joint Chiefs of Staff, Pentagon: The MAC Liaison Officer serves as a member of the operations planning group in the National Military Command Center. Because of his aviation expertise, he is able to represent MAC in providing information to JCS on airlift rescue and weather capabilities. First hand knowledge of MAC's ablities is a must.

8. Assistant Deputy Chief of Staff for Operations, HQ Pacific Air Forces, Hawaii: This rated officer is the principal advisor to the Commander Pacific Air Forces on Tactical Air employment strategy and dqctrine. His experience in aviation was essential in developng his expertise in this area. Additionally, he is responsible for evaluating both the combat capability of PACAF Flying Units and security assistance programs to recipient nations.

9. Director of Command and Control, Pacific Air Command, Hawaii: Individual oversees the flying operations of one E-3A Airborne Warning and Control Squadron and two forward Air Control Squadrons. This rated officer is the approval authority for this command's flying training regulations. His aviation expertise allows him to assess new developments in tactics and operations procedures and their applicability in combat. Indepth aviation experience is crucial in this billet.

10. Deputy for Counterair Armament Division, Eglin AFB, FL: The current Deputy is a Command Pilot with 4,500 flyng hours. He flew fighters in southeast Asia and has held several key positions as a program director and engineer. The Air-to-Air combat mission experience this individual has is crucial in bridging the gap between highly sophisticated hardware development and the aircrew member which must employ it. His experience is extremely important in directing a predominately non-rated and civilian work force that has little or no interface with the Tactical Mission. He is the checkpoint for determining whether the technically feasible is tactically doable.

The quality of our Air Force programs is dependent upon our leadership. The aviation experience of our leaders places everything in its proper perspective - winning in combat. The following chart offers examples of the level of responsibility these rated colonels in a non-flying job have:

Position	Total Budget Responsibility	# Aircraft	# Personnel
1. F-111 System Manager	$ 5.6 Billion	428	140
2. Chief, F-16 Requisition Division	$500.0 Million	2,268	260
3. Director of Logistics for B-1B	$ 26.5 Billion	99	75
4. Chief A7 and KC-135 System Management Division	$ 12.5 Billion	984	147
5. Chief, Acquisition Division, E3A and E4	$670.0 Million	39	283
6. Chief, B-52 and Missiles System Management Division	$500.0 Million	39	217
7. F-15 System Management	$200.0 Million	729	217
8. Chief, System Management Division, Transports	$ 76.2 Million	5,191	313
9. Chief, System Management Division, Cargo and Helicopter	$580.0 Million	3,925	327
10. A10/Misc Acft Division Chief	$151.5 Million	3,888	188

DEPENDENT STUDENT TRAVEL

QUESTION: What amount is requested, by appropriation, for dependent student travel in the FY 1985 budget request?

ANSWER: The following amounts have been requested for student dependent travel in FY85 in the O&M account:

Army - $2.0 million
Navy - .7 million
Air Force - 1.8 million
Marine Corps - .2 million

QUESTION: Are funds included in the legislative contingency to expand the program? How much?

ANSWER: No. The Department has not taken any action to expand the program except to update original cost estimates to reflect more current data on numbers of dependent students expected to use the program.

VARIABLE HOUSING ALLOWANCE

QUESTION: The VHA study estimates that military members were not reimbursed for about 30 percent of their housing costs prior to implementation of VHA. Calculating the increase in BAQ plus VHA since 1980, the average member's housing compensation appears to have risen in excess of BLS increases, even when 30 percent is added to 1980 BAQ levels to better estimate housing costs in 1980. What is the cumulative percentage increase of housing compensation in excess of BLS housing increases from 1980-1984? If precise figures are not available please estimate.

ANSWER: Since implementation of the VHA in FY81, the cumulative increase in BAQ plus VHA has been approximately 21 percent. As shown on page II-9 of the VHA study, the increase in the housing component of the CPI, weighted by the expenditure pattern of military personnel, has been about 27 percent. Data unweighted by the military expenditure pattern show similar increases. For example, the shelter component of the CPI increased 22 percent, while the housing component, which includes such items as fuel and other utilities in addition to shelter, increased 23 percent. By any measure, therefore, housing compensation has not been increased in excess of BLS housing cost increases from 1980-1984.

QUESTION: What is the cumulative percentage increase in average housing costs since 1980 for military members?

ANSWER: As shown on page II-9 of the VHA study, military member housing costs have increased by approximately 33 percent since 1980.

VHA ABSORPTION

QUESTION: Other than because the law provides for a 15 percent absorption factor, what rationale can be provided to the Committee for maintaining this level? Please address absorption rates of 10, 20, and 25 percent.

ANSWER: Whether, and to what extent, military members absorb housing costs--be it 10, 15, 20, 25 or some other percent--is dependent upon one's judgment about what is fair to military personnel and what is the government's obligation to provide adequate housing for its military members. Obviously, the higher the absorption factor, the greater the expense military members must pay "out of their own pocket." It was the judgment of the Congress when they enacted the VHA program in 1980 that an absorption factor of 15 percent of BAQ was reasonable. Due to restraints placed on the program in the past two years, the absorption factor is now nearly 30 percent. In our recent study of VHA, we concluded that the standard used by the Congress in 1971 to set BAQ rates, i.e., that BAQ should equal 85 percent of national median housing expenses, remains valid today. We recommended, therefore, that housing allowances be set to equal 85 percent of national median housing expenses, with BAQ set at 70 percent and the remaining 15 percent allocated to VHA. The recommended absorption factor of 15 percent of median housing expenses is equivalent to an absorption of 21.4 percent of BAQ. Our recommendation, therefore, would result in an increase in the statutory absorption of 15 percent of BAQ, but would be a decrease from the 30 percent of BAQ which members are currently experiencing.

QUESTION: Under the new VHA proposals is it correct that 15 percent would be the absorption factor in 1985?
ANSWER: The absorption factor would be 15 percent of median housing expenses which, as pointed out previously, is equivalent to 21.4 percent of BAQ.

QUESTION: How will the proposed 5.5 percent pay raise impact on absorption?
ANSWER: The VHA study recommended that BAQ rates be increased by an average of 13 percent so as to equal 70 percent of national median housing expenses. In other words, we are recommending that BAQ be adjusted outside of the normal pay raise process in FY 1985. The 5.5 percent raise would apply only to basic pay and BAS, and therefore would not affect the absorption rate.

QUESTION: What would be the effect of a 3.5 percent raise or a pay freeze on the absorption rate?
ANSWER: As pointed out in the answer to the previous question, the absorption rate would be unaffected by the pay raise since it would apply only to basic pay and BAS in FY 1985. We assume that the BAQ rates will be increased by an average 13 percent as part of the VHA reform, instead of being increased as part of the normal pay raise process.

QUESTION: On page VI-15 of the VHA study, the claim is made that in FY 1984, service members spent 1.1 percent more on housing than national averages. Is this based on a comparative increase from 1983-1984, or on actual averages?
ANSWER: The computation of the 1.1 percent difference is explained on pages II-8 and II-9 and table 2-4 of the VHA study. The data show that military member housing costs increased 7.5 percent between FY83 and FY84 as reported on the survey of member personnel. The increase in the relevant housing components of the Consumer Price Index (CPI), weighted by the expenditure pattern of servicemembers, increased by 6.4 percent over the same period. Therefore, military members spent 1.1 percent more on housing between FY83 and FY84 than the national civilian average as reflected in the CPI.

QUESTION: What statistical data do you have that compares military housing costs to civilian housing costs?

ANSWER: As discussed on pages IV-8 and IV-9 of the VHA study, there is no data readily available with which to make valid comparisons between military and civilian housing costs. The available sources for civilian housing costs--such as the CPI and Census/HUD data--are not comprehensive and/or timely enough to establish accurate figures on housing expenses in many of the locations to which military personnel are assigned. For this reason, and because the civilian housing costs may not be representative of the costs experienced by military personnel even if available, it is our position that, while aggregate funding for VHA can be adjusted by the use of a national index of civilian housing expenses, military housing expenses should continue to be used to establish local VHA rates.

QUESTION: If military members choose to spend more on housing than national averages, won't this increase the absorption rate?

ANSWER: Not necessarily. The future absorption rate will depend on the relative change in three factors: BAQ, which will be adjusted by the pay raise; VHA, which will be adjusted by the housing component of the CPI; and median housing expenses, which will be determined by a survey of military members. For example, even if median housing expenses as reported in the survey of military members go up faster than the housing component of the CPI, it is possible for the absorption rate to go down through an increase in BAQ which more than offsets the differential.

QUESTION: What level of absorption would be considered unacceptable and lead to a request for further BAQ increases?

ANSWER: We have not predetermined an absorption rate which would automatically trigger a request for an increase in BAQ rates. It is our expectation that, if adjustments to BAQ and VHA are made in accordance with the recommendations of the VHA study, the absorption rate will not rise or fall markedly from the 15 percent factor.

VHA AND BAQ

QUESTION: How would VHA and total housing compensation be affected by the annual increase in BAQ? Please discuss the effect if BAQ increases exceeded inflation or were lower than inflation.

ANSWER: Under the reformed VHA program recommended in the VHA study, the connection between BAQ and VHA is severed. BAQ rates will be adjusted as part of the annual pay raise, while VHA will be adjusted by the housing component of the CPI. In FY85, BAQ rates will be set equal to 70 percent of median housing expenses (MHE), VHA will equal 15 percent of MHE, and the member will absorb 15 percent of MHE. It is difficult to predict how these proportions will change in subsequent years because each of the components are adjusted by different factors. However, in general, it can be stated that if BAQ increases exceed increases in the CPI and MHE, the absorption rate will go down; and if BAQ increases are lower than increases in the CPI and MHE, the absorption rate will rise.

QUESTION: The VHA study estimated net savings in VHA of $140 million. The revised budget accounted for savings of $135 million. Please explain the difference.

ANSWER: The net savings of $140 million identified in the VHA study includes all uniformed services. The $135 million is the portion attributable to the Department of Defense.

QUESTION: Why is it necessary to continue to survey military members if local BLS statistics are available to measure average increases?

ANSWER: Local BLS statistics are not available to measure average increases in all of the areas to which military personnel are assigned. BLS statistics include national figures and some selected major urban areas. Therefore, while we will use BLS statistics to adjust the aggregate funding for the VHA program, it will still be necessary to survey military members in order to determine an equitable distribution of the aggregate funding.

QUESTION: On what baseline are the revised BAQ rates based?

ANSWER: The baseline for the revised BAQ rates is 70 percent of national median housing expenses as reported in the survey of military members in the spring of 1983 and adjusted by the 4.8 percent increase in the housing component of the CPI between October 1982 and October 1983.

QUESTION: What impact will the 1984 housing survey have on your estimated costs and calculation of the revised BAQ rates?

ANSWER: None. The 1984 housing survey will be used only to allocate the aggregate VHA funding. This amount has already been estimated based on 15 percent of national median housing expenses as reported in the 1983 housing survey and adjusted by the 4.8 percent increase in the housing component of the CPI between October 1982 and October 1983.

QUESTION: How does the housing component of the CPI weigh home purchases?

ANSWER: Beginning in January 1983, homeownership costs in the Consumer Price Index for "All Urban Consumers" are measured by using the concept of rental equivalence. The rental equivalence approach calculates homeowner costs of the shelter based on the implicit rent owners would have to pay to rent the homes they own. The old method calculated homeowner costs as home purchase, mortgage interest costs, property taxes, property insurance, and maintenance and repair.

QUESTION: Will use of this measure overcompensate renters or homeowners who remain in the same home for many years?

ANSWER: Persons who are able to remain in the same housing for an extended number of years, and who thus may be given favorable rent as a result of a long-term occupancy, or who as homeowners would have level mortgage payment expenses, could very well be overcompensated for housing under this system. However, in the case of military personnel, most of whom move frequently, this will not occur. As a matter of fact, as a result of their frequent moves, there is a greater likelihood that military personnel will be undercompensated. It should be noted here that neither the CPI nor the survey of military personnel uses actual homeowner outlays as a measure of their housing costs; rather, a rental equivalency value is used in both cases.

QUESTION: The VHA study states that rental data is skewed toward apartments and smaller homes. Considering that the majority of government quarters fit these categories, why wouldn't excluding homeowner data provide a more equitable comparison between those living in quarters and those living on the economy?

ANSWER: Homeownership cost data is excluded in determining VHA rates. We believe, however, that the type of housing occupied by homeowners should be considered in setting the rates. The distribution of personnel occupying government quarters, which is heavily dominated by single junior enlisted personnel, is totally unrepresentative of personnel living on the economy, and therefore basing the rates only on government-type quarters is unrealistic and unfair to those members who obtain housing in the civilian community. We believe a solution equitable to the member and to the taxpayer is to include military homeowners in the determination of VHA rates, but use rental equivalency instead of homeowner outlays as the measure of homeowner costs.

QUESTION: Considering that those military members receiving VHA who purchase homes receive a double tax benefit associated with their mortgages, wouldn't excluding homeowner data provide a better balance of benefits by adequately reimbursing renters and allowing homeowners to forego a portion of their tax advantage for increased costs associated with homeownership?

ANSWER: We believe that homeownership is a personal decision on the part of the member and should not be rewarded or penalized in the setting of VHA rates. Therefore, we disagree that homeowners should be "allowed to forego" a portion of their tax advantage. As stated above, we believe the solution most equitable to the member and to the taxpayer is to include military homeowners in the determination of VHA rates, but use rental equivalency instead of homeowner outlays as the measure of homeowner costs.

QUESTION: What would be the effect of pricing the cost of on-base housing in terms of the local economy and providing that amount for members who live on the economy? Wouldn't this be a more equitable solution for reimbursing members who live off base?

ANSWER: If the same type of housing that is provided on-base, appropriate for rank and family situation, were available to the member in the local economy, then determining housing allowance rates in this manner would be acceptable. However, if done properly, this method should produce rates that would not be materially different from the current method, plus it has the disadvantage that it would require a substantial administrative and management organization in each of the local areas to administer the program. We believe, therefore, that the VHA program recommended in the VHA study is an equitable solution for reimbursing members who live off base.

QUESTION: Under the VHA proposals, the estimate of unreimbursed costs is $89/month. Can you provide an estimate by grade, married and single?

ANSWER: The information follows:

UNREIMBURSED MONTHLY HOUSING COSTS

Grade	With Dependents	Without Dependents
General Officers	$152	$124
O-6	138	114
O-5	127	107
O-4	116	98
O-3	97	80
O-2	83	64
O-1	75	55
W-4	105	90
W-3	94	76
W-2	88	69
W-1	76	58
E-9	99	73
E-8	92	67
E-7	86	58
E-6	78	51
E-5	69	47
E-4	60	41
E-3	55	40
E-2	55	34
E-1	55	31

SUBCOMMITTEE RECESS

Senator STEVENS. Thank you very much. The hearing will be in recess.

[Whereupon, at 11:10 a.m., Wednesday, April 4, the subcommittee was recessed to reconvene at the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1985

THURSDAY, APRIL 26, 1984

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10:14 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Andrews, Rudman, and Stennis; also present: Senator Leahy.

DEPARTMENT OF DEFENSE

DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR RESERVE AFFAIRS

STATEMENT OF EDWARD J. PHILBIN, DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR RESERVE AFFAIRS

RESERVE AFFAIRS

SELECTED RESERVES BUDGET

Senator **RUDMAN**. The subcommittee will come to order.

Senator Stevens has been delayed at another hearing this morning, and will be joining us sometime in the next half hour. In the meantime, in the interest of time, he has asked me to start the hearing. So we will proceed.

We are here today to discuss the fiscal year 1985 budget request for Selected Reserves.

For many years the Congress has been concerned that Reserve forces were neglected in favor of a reliance on active components. The Congress has consistently encouraged the Department of Defense to utilize the Reserve components more effectively.

Substantial progress has been made in the past few years, but it appears that more progress can be made. We will be very interested to hear the views of our many witnesses today on the current status of the Reserve forces and the funding requirement for fiscal year 1985 and beyond.

BUDGET REQUEST

The fiscal year 1985 defense budget request includes approximately $16 billion for equipping and supporting the Selected Reserves: $8.1 billion for military pay, $6.2 billion for operations, and $1.7 billion for equipment purchases.

This is the first time that funding for Reserve equipment has been clearly specified in the defense budget request. The committee requested this addition, and strongly endorses its inclusion.

The request also includes a manpower increase of 52,200, up from 1,051,500. Of this increase nearly 20,000 are for full-time active guardsmen and reservists.

We welcome today Dr. Edward Philbin, the Deputy Assistant Secretary of Defense for Reserve Affairs, along with the chiefs and directors of the Reserve components.

Gentlemen, your printed statements will be included in the record, and we would appreciate it if you would summarize your remarks.

Dr. Philbin, we understand that this will probably be your last opportunity to express your views to the committee as the Deputy Assistant Secretary of Defense for Reserve Affairs. On behalf of the members of the committee, the chairman would like to commend you on your assistance to this committee and your efforts within the Defense Department as the principal spokesman for the Guard and Reserve Forces.

Dr. Philbin, if you would like to proceed.

I would first ask my colleague, Senator Stennis, if he has any opening statement?

Senator STENNIS. I have no statement, except that I am delighted to be here to listen to the testimony. I may have some questions later.

Thank you very much.

Senator RUDMAN. If you would proceed, Dr. Philbin.

ACTIVITIES OF RESERVE COMPONENTS

Dr. PHILBIN. Senator Rudman, and Senator Stennis.

I am grateful for the opportunity to testify on the status of the Guard and Reserve components of the Armed Forces of the United States.

The seven Reserve components represent a first-class fighting force fulfilling global responsibilities on a daily basis. Army Guard and Reserve, Air Guard and Reserve, Navy, Marine Corps, and Coast Guard Reserve units are involved in both operational and training missions that run the gamut from landing exercises on NATO's northern flank, to 24 hours a day air defense of the continental United States and Hawaii, to medical evacuation in Lebanon, to combat support missions in Grenada, and to antisubmarine patrol missions over the oceans of both hemispheres.

The Reserve Forces are not a panacea. There are without doubt many missions that in peacetime must be assigned to the Active Duty Forces alone, but it is a brag within the Reserve Forces that in their professional abilities and their dedication, one cannot distinguish a guardsman or reservist from his or her fulltime Active Force counterpart.

Effective fighting forces are a product of proper equipment, training, and cohesion of personnel. The military forces throughout modern history that have distinguished themselves in battle, be they Regulars or reservists, have had as a common denominator, a sense of pride and unit identity.

It is essential that funds continue to be made available to equip and train the Reserve Forces, and to insure that they are integrated into the military structure as fully functional units or, where appropriate, as trained individuals, but always as equal partners in the defense of the Nation.

MANPOWER AND EQUIPMENT STATUS

In my written statement, I have gone into some detail on the manpower and equipment status of the Reserve components. An effective force mix is contingent on both trained Guard and Reserve manpower in adequate numbers, and on equipment that is both appropriate to the missions and compatible with the Active Forces. If I were asked to identify which of these represented the greatest problem today, I would say that the shortage of modern, compatible equipment is the more severe of the two.

AGING AIRCRAFT INVENTORY

The problem of an aging aircraft inventory is enormous. It has overtones of safety as well as combat effectiveness. Incompatibility in communications equipment between Reserve and Active components can cost lives and it can lose battles. Shortages in medical equipment are another area of grave concern, and there are many others.

Despite the difficulty and the magnitude of the problem, the Guard and Reserve Forces will be relied upon to fulfill their wartime responsibilities should a crisis arise. In many instances, we literally cannot field an effective combat force without them. In recognition of this reality, Congress and the Defense Department must continue to address this problem with all of the dedication that it so obviously deserves.

COMPARATIVE COSTS OF GUARD AND RESERVE LIKE UNITS

The treatment of comparative costs between like units of the Active, Guard, and Reserve is an important element in the force mix decision process. Obtaining proper comparative data has been difficult, and much work remains to be done in this area. There is, however, general agreement that units in the Reserve components cost less than like units in the Active Forces.

While this is true for the most part, it is also recognized that the cost differences vary greatly depending upon the types of units and the tempo of operations demanded of them. An F-16 squadron costs just as much to equip in the Guard and Reserve as it does in the Active Air Force. The number of flight hours the squadron produces and the kinds of training it performs have a direct effect on the operating costs irrespective of the component. On the other hand, the personnel costs associated with the Active Force are intrinsically greater in most cases.

So this is an area where we have an ongoing analysis. We have made the first faltering steps, and I think at this point we have more data than we ever have had before in the Department of Defense.

I am convinced that as we continue to seek ways to improve the efficiency and employment of our Guard and Reserve, we will at the same time improve the total capabilities of our national defense establishment and that, of course, remains our foremost aim.

Senator Rudman, this completes my prepared statement, and I am grateful for the opportunity you have given me to appear before you today. I am prepared to answer any questions that you or Senator Stennis may have.

STATEMENTS OF ASSOCIATES

Senator **Rudman**. I think what we will probably do now is, following your prepared statement, have your associates at the table with you present their statement in any order in which you might like to have them.

[The prepared statement of Dr. Philbin follows:]

PREPARED STATEMENT OF EDWARD J. PHILBIN

DEPUTY ASSISTANT SECRETARY OF DEFENSE

(RESERVE AFFAIRS)

Mr. Chairman, Members of the Subcommittee, I am grateful for this opportunity to submit testimony on the status of the Guard and Reserve Components of the Armed Forces of the United States.

The seven Reserve Components represent a first class fighting force fulfilling global responsibilities on a daily basis. Army Guard and Reserve, Air Guard and Reserve and Navy, Marine Corps and Coast Guard Reserve units are involved in both operational and training missions that run the gamut from landing excercises on NATO's northern flank, to 24-hours a day air defense of the Continental United States and Hawaii, to medical evacuation in Lebanon, to combat support missions in Grenada, to anti-submarine patrol missions over the oceans of both hemispheres. The reserve forces are not a panacea, there are without doubt many missions that in peacetime must be assigned to the active duty forces alone, but it is a brag within the reserve forces that in their professional abilities and their dedication one cannot distinguish a Guardsman or Reservist from his or her full-time active force counterpart.

Effective fighting forces are a product of proper equipment, training and cohesion. The military forces throughout modern history that have distinguished themselves in battle be they regulars or reservists have had as their common denominator a sense of pride and unit identity. It is essential that funds continue to be made available to equip and train the reserve forces and to insure that they are integrated into the military structure as fully functional units or, when appropriate, as trained individuals but always as equal partners in defense of the nation. In the remainder of my testimony I will deal with specific areas that are critical to Guard and Reserve readiness today.

Selected Reserve Strength

The strength of the reserve components continues to improve. In 1983 the Selected Reserve exceeded 1,000,000 members, the highest strength level achieved since 1961. However, both the Army Guard and Army Reserve have experienced a downturn in recruiting for the first quarter of FY 1984 (Oct - Dec 83). Army Guard accessions were down 34% from a year ago; Army Reserve accessions were off 11% from the same period in 1983. Despite these difficulties we expect to reach this year's objectives through increased recruiting efforts and continued good retention in the Guard and Reserve.

Table 1 displays the strength of the Selected Reserve by component from the end of FY 1980 through the end of FY 1986:

TABLE 1
SELECTED RESERVE STRENGTH BY COMPONENT
(End FY - 000's)

Component	FY 1980 Actual	FY 1983 Actual	FY 1984 Estimate	FY 1985 Request	FY 1986 Planned
Army National Guard	366.6	417.2	433.0	447.3	471.0
Army Reserve	206.6	266.2	278.1	298.4	308.1
Naval Reserve	87.0	109.1	122.5	128.8	134.7
Marine Corps Reserve	35.4	42.7	43.9	46.4	47.9
Air National Guard	96.3	102.2	104.1	107.9	109.0
Air Force Reserve	58.9	67.2	69.9	74.8	79.3
DoD TOTAL	850.8	1004.5	1051.5	1103.7	1149.9

The FY 1985 request will allow the DoD to fill 89 percent of its Selected Reserve wartime unit requirements. The trained strengths i.e., (the number of members assigned to a reserve unit who are trained and deployable) of the Air National Guard, the Air Force Reserve and the Marine Reserve will be at approximately 95 percent of their requirements in FY 1985, the Army Guard and Reserve are at approximately 90 and 86 percent respectively of their wartime requirements and the Naval Reserve 87 percent. By contrast the active components will be at 92.5 percent of requirements for strategic, tactical and mobility forces.

From the beginning of the All-Volunteer Force in FY 1974 through the end of FY 1978, the reserve components experienced significant strength declines. These totaled approximately 136,800. The decline in the Army National Guard and Army Reserve alone was 111,500. However, since FY 1979, the Department has had an aggressive program to build Selected Reserve strength. In addition to the general revival of patriotism throughout the country which has enhanced all recruiting during this Administration, there are four principal actions which have led to the successes in rebuilding the strength of the Selected Reserves.

First, in FY 1979 Congress authorized and funded an incentive program for enlistment and reenlistment in the Selected Reserve. The Congress has approved increases in this program every year since its inception. The actual cost of this program, including anniversary payments on bonuses, was $58.1 million in FY 1982 and $76.9 million in FY 1983. The Department expects to spend $96.0 million in FY 1984 and is requesting a total of $108.0 million for these incentives for FY 1985. These authorized incentives are for enlistment and reenlistment bonuses, educational assistance, an affiliation bonus for prior service members, and a student loan repayment program. With the exception of the student loan repayment program, the bonus programs are authorized through 1985; the loan repayment program expires at the end of FY 1984. The substantive impact of the enlistment incentives in improving the strength and quality of the Army Guard and Army Reserve is being studied. Earlier research on the reenlistment bonus program shows that these incentives have produced an average commitment of 4.4 years among those who took a bonus compared to a 1.3 year commitment in the non-bonus control group. Extension of the bonus authorities and increases in the amounts which may be offered to prospective recruits and reenlistees are deemed essential to sustaining the momentum gained in manning the Guard and Reserve.

Second, in conjunction with a successful incentive program, Congress has authorized additional recruiting resources since the mid-seventies including a full-time reserve recruiting force, which has provided reserve recruiting a solid foundation comparable to that of the active component recruiting program. We are now reaping the benefits of this professional reserve recruiting force in the number and quality of enlistments. Additional funds for Guard and Reserve advertising have also been provided. These resources have proven to be very cost-effective and should be continued.

Third, to expand the recruiting market, a split training option was initiated which allows full-time students and seasonal workers to participate in the Selected Reserve without interfering with normal school and work schedules. By splitting the usual 12-week initial active duty for training period into two increments this option permits the reserve components to enlist greater numbers of talented high school and college students while they are still in school and attract seasonal workers as well. This program will be expanded as we strive for more enlistments within an increasingly constrained pool of eligible military manpower.

Fourth, the Congress has made available additional Full-Time Support personnel (these include Active Guard and Reserve and military technician positions), to provide the Reserve Components with day-to-day management, administration, training, and maintenance. By the end of FY 1985, the Air National Guard and the Air Force Reserve will have 27% and 12%, resepctively, of Selected Reserve strength in Active Guard/Reserve or military technician FTS positions. These levels are expected to increase somewhat with changing missions and conversion to more technologically complex aircraft and equipment. FY 1985 FTS levels for both the Army National Guard and Army Reserve will amount to approximately 11% and 8% respectively. These are expected to increase to 16% and 11% of Selected Reserve strength by FY 1988 in order to bring combat readiness to required levels. In the Naval Reserve, FY 1985 FTS will amount to approximately 12-13% of Selected Reserve strength. Table 2 shows the strengths that have been programmed in order to meet the FTS requirements for the Reserve Components through FY 1988.

TABLE 2
FULL-TIME SUPPORT

	FY 1985 End Strength	Projected FY 1988 End Strength
Army National Guard	50,702	78,800
Army Reserve	22,612	34,000
Naval Reserve	15,410	18,000
Marine Corps Reserve	1,129	1,700
Air National Guard	29,070	30,200
Air Force Reserve	8,928	9,500
TOTAL	127,851	172,200

Individual Manpower for Mobilization

The nation's demand for military manpower in wartime is initially filled by Active, National Guard, and Reserve forces. Since these forces alone will not meet total manpower requirements, the Department of Defense relies on other sources of pretrained manpower to fill the gap. Table 3 represents legislative action undertaken by this Congress to improve our military manpower situation. These elements are discussed below.

TABLE 3
CONGRESSIONAL SUPPORT OF MOBILIZATION
MANPOWER PREPAREDNESS

(FY 1984 Defense Authorization Act)

- Military Service Obligation Extension
- Reserve Retiree Recall
- Stop-Loss Authority

The Individual Ready Reserve (IRR) and retired military members subject to recall constitute the largest part of the pretrained manpower pool. We have made great strides to enhance the management of this manpower pool. Current estimates of the number of members in these categories available for mobilization indicate that in the near term there would be significant wartime manpower shortfalls especially in combat arms and critical skill areas.

As a result of a number of legislative and policy initiatives IRR strength has grown from a low point of 342,000 in June, 1978 to 417,000 by the end of FY 1983. Table 4 shows IRR strength by service. Further significant strength increases will require both retaining members for longer periods and providing new sources of entry to the IRR.

TABLE 4
IRR STRENGTH BY SERVICE
(End FY - 000s)

	Actual			Projected
Service	FY 1981	FY 1982	FY 1983	FY 1984
Army	223	230	256	266
Navy	99	78	70	85
Marine Corps	52	45	47	43
Air Force	45	43	43	31
DoD TOTAL	419	396	417	425

The President's Military Manpower Task Force recognized the need to increase the mobilization manpower pool and recommended that the Congress authorize longer service obligations. Also, as an interim measure, it recommended incentives to increase current IRR strengths. The Congress approved the Department's request to authorize the Secretary of Defense to extend the military service obligation from not less than six to no more than eight years and to resume IRR bonuses. An 8-year service obligation will be implemented on June 1, 1984. This will add about 150,000 members to the IRR beginning in 1990.

Ensuring sufficient numbers of people in the IRR, however, solves only part of the problem. To be consistent with our goal to create a more substantial and effective pretrained manpower resource we need to provide the services with the funds to manage this resource effectively. Such management includes personnel records maintenance, screening of key employees, establishing dependent entitlements, updating security clearances, offering training opportunities and providing pay and other benefits when appropriate. The FY 1985 budget request includes resources to continue initiatives in this area including the peacetime preassignment and predesignation of individuals to fill mobilization positions, training opportunities for more IRR members and expansion of service programs that identify mobilization positions that retirees can most effectively fill.

A major initiative with respect to retired reservists was enacted by the Congress in 1983. This change authorizes ordering to active duty retired reservists who have completed at least 20 years of service thus placing retired reservists on the same recall basis as retired members of the regular services.

The Congress also provided the President permanent emergency authority during periods of national crises. It allows him to suspend certain laws relating to promotion, retirement, and separation. During national emergencies this presidential power, normally referred to as "stop-loss" authority, allows the retention on active duty of personnel who might otherwise be released or retired. They would be retained on active duty until the President determines the need for their services no longer exists.

To ensure the rapid notification of individual Reserve members and military retirees in the event of mobilization, the Department plans to use "mailgrams" that consist of an order to active duty and an emergency travel warrant. The travel warrant is currently being standardized to expedite processing by commercial carriers. We are conducting a full technical analysis of the mailgram system to determine its surge capacity in the early days of mobilization. Backup systems such as computer-generated mail and direct mail are being examined as well.

We are confident that this integrated program of strength increases and improved management can satisfactorily resolve gross mobilization manpower shortages by 1990.

Locating members of the IRR who fail to keep the Department informed of their whereabouts remains a problem. At present, the majority of enlisted members of the IRR have 2 years or less remaining of their obligation. Our best judgment is that we can currently locate about 92% of these members. However, with an 8-year military service obligation, this problem will grow in actual numbers of non-locatables. The Department is exploring alternatives to solve this problem. There is a critical need to improve and maintain our records on this vital source of mobilization manpower.

Compensation/Entitlements

In order for our Guard and Reserve members to remain a viable element of our total military force, it is imperative that we remain sensitive to the impact of compensation adjustments affecting them. Compensation and entitlement changes that are not also applicable to their active service counterparts conflict with the provisions of 10 USC 277 which prohibit discrimination between Regulars and Reserves. Guard and Reserve forces must continue to utilize compensation systems and policies that, wherever possible, parallel those used in the active service.

Basic Allowance for Quarters. Of particular concern were suggestions made by the Senate Appropriations Committee during the last session that Basic Allowance for Quarters (BAQ) for Reservists and Guardsmen performing active duty training be eliminated as a cost-saving measure. The Defense Department has provided a full response to the questions raised which lays out the facts on this issue and expresses our concerns with respect to the potentially far-reaching impact on any such changes to entitlements to Guard and Reserve members.

Other Items

Commissary Test. The Department recently began a one-year test permitting Guardsmen and Reservists to use up to 14 days of their earned commissary benefits at their convenience throughout the year, rather than using them only during annual active duty training periods. The test was directed by the Congress in Section 1013 of the 1984 DoD Authorization Act (P.L. 98-94).

Over 102,000 Guard and Reserve members will participate in the test at 22 military commissaries located within the New England States and the metropolitan areas of San Antonio and Los Angeles. The intent of the test is to gather the data needed to assess the impact of implementing the program on a permanent, nationwide basis. A report of the test results and the Department's recommendations will be made to the Armed Services Committee of the Senate and House of Representatives at its completion.

Protections for Guard and Reserve Members during Inactive Duty Training (IDT). As the Guard and Reserve assume added and more demanding missions we must ensure our members meet the standards of physical fitness required by their service. Concerns that Guard and Reserve members are not adequately covered in the event of injury or disease associated with their duties during IDT are highlighted by strenuous physical fitness tests that have, on occasion resulted in incapacitating injuries.

Under provisions contained in last year's Defense Authorization Act, Reservists injured while traveling directly to or from their inactive duty training site will now be entitled to medical coverage. In the past, they were eligible for such coverage only for injuries received at the training site. While this change is an important first step, there still remain statutory inequities between active duty and reserve personnel in the treatment of those who are injured, become ill, or die while fulfilling their military service responsibilities. We must ensure that the Department's policies in this area are as fair and effective as possible within the law. The Army, acting as the executive agent for the Department, is currently analyzing our incapacitation pay procedures for Guard and Reserve members who are injured during IDT. Legislative changes may be required in this area. If so we will submit recommendations for your consideration on completion of our review.

Reserve Personnel Management Act

A high priority of the Department is passage of a Reserve Officer Personnel Management Act (ROPMA). A comprehensive system of law governing the appointment and career management of reserve officers was first enacted in 1954. Only piecemeal adjustments to that legislation have been made during the ensuing thirty years. With the implementation of the Defense Officer Personnel Management Act (DOPMA) in 1981, it has become increasingly important that companion legislation for reserve officers be enacted.

We have completed a comprehensive review of applicable laws and are developing legislation that will be responsive to changing Guard and Reserve officer requirements over a wide range of strength levels and contingencies. Such legislation would allow us to improve our long-range planning which is so essential to force management. It would also help us to provide our reserve officers with attractive and reasonably predictable careers and help us attract and retain officers of the proper age and grade who possess the skills and experience we need.

Guard and Reserve Equipment

In December 1981, a few months after I assumed the position of DASD(RA), I reported to the Congress a shortfall of Guard and Reserve equipment of almost 18 billion dollars. That figure is now estimated to be in excess of 24 billion dollars. This does not reflect a backward trend in our efforts to equip the Guard and Reserve. What it does mean is that due to Congressional and Defense Department initiatives we are getting a much better handle on the magnitude of the equipment problem and are therefore becoming more explicit in its portrayal. The Congressionally mandated National Guard and Reserve Equipment Report for FY 1985 was delivered to the House and Senate on 15 February 1984. This is the third annual report on Reserve Component equipment status and it shows an improvement in certain areas but clearly indicates the magnitude of the problem remaining. Even the 24 billion dollar shortfall does not fully reflect such problems as modernization, substitution, aging/obsolescence, and non-deployability. Nevertheless, it is a much more realistic figure than the 18 billion dollars previously reported.

Expenditures are an indication that progress is being made. Over 8 billion dollars has been committed to Guard and Reserve procurement in the last four defense budgets, including the 1.7 billion dollars in the FY 1985 request. The impact of procurement against shortages, however, is not immediate since the readiness effects are not felt until the equipment actually enters the inventory of the reserve component. Due to procurement lead times, unscheduled distribution diversions, e.g., Foreign Military Sales or force structure changes which can alter the priority status of the intended recipient, equipment distribution seldom occurs during the year of procurement; often it is not evident before the second year after procurement. Thus in the current situation much of the impact of the 8 billion dollars in Guard and Reserve procurement has yet to be realized.

Where progress in equipping the Guard and Reserve is most apparent is in the redistribution of existing assets from the active to the reserve forces. Formerly the reserve forces were equipped almost exclusively with items that had been declared as outmoded or obsolete by the active forces. Today by contrast at least some first line equipment of the same type as that is being procured by the active forces is entering the reserve inventories. We are seeing a significant trend in this area which lends growing credence to the Secretary's policy that those forces which are to be used first must be provided resources first, irrespective of whether they are Active, Guard or Reserve. Some examples of this modernization during fiscal years 1983 and 1984 are shown in the following table.

	FY 82 ON HAND	FY 83 DIST	FY 84* DIST	CURRENT* TOTAL ON HAND
Army National Guard				
M-1 Tank	0	63	0	63
M60A3 Tank	90	42	68	200
Navy Reserve				
FFG-7 Frigate	0	0	3	3
F/A-18 Aircraft	0	0	12	12
Marine Corps Reserve				
KC-130T Aircraft	0	0	4	4
Air National Guard				
F-16 Aircraft	6	18	6	30
Air Force Reserve				
F-16 Aircraft	0	0	16	16

* Projections

Despite such progress, in general the conditions of which I spoke three years ago still prevail and will continue to do so for some time to come. Decades of neglect cannot be corrected overnight. The Army Guard and Reserve are still short of such critical items as trucks, personnel carriers, aircraft, air defense artillery. The Naval and Marine Corps Reserve have shortages of support equipment, engineer equipment and modern aircraft. The Air Reserve Forces lack some support equipment and most of their electronic countermeasure equipment and of course suffer from the problems of an aging aircraft inventory as well.

The problems of aging aircraft and ships in many cases necessitate use of substitute equipment which is not adequate to meet full mission requirements. This is especially true of the communications/electronics equipment, much of which is outmoded. These conditions are not unique to the reserve forces, they are experienced by the active forces as well. The Total Force is bound by fiscal reality to do the best it can with what is provided. Unfortunately, satisfaction of the reserve component needs in meeting their growing roles and missions, is difficult to accommodate simultaneously with the need to modernize the active force. Despite the enormous difficulty and magnitude of the problem the Guard and Reserve Forces will be relied upon to fulfill their wartime responsibilities should a crisis arise. In many instances we literally cannot field an effective combat force without them. In recognition of this reality Congress and the Defense Department must continue to address this problem with all the dedication that it so obviously deserves.

Force Mix

The active/reserve force mix discussion that has been taking place within this Administration and within the Congress is both healthy and vital to the national defense. This subject has been an ongoing concern in our society since the early days of the Republic. At the close of World War II General George Marshall addressed the issue in this fashion:

> "What then must we do to remain strong and still not bankrupt ourselves on Military expenditures to maintain a prohibitively expensive professional Army even if one could be recruited? President Washington answered that question in recommendations to the First Congress to convene under the United States Constitution. He proposed a program for the peacetime training of a citizen Army."

In keeping with the need for a strong citizen armed force this Administration's efforts have focused on the proper manning, training and especially proper equipping of the Guard and Reserve. The progress made to date has been dependent to a great extent upon the support we have received from the Congress. There can be no doubt that if the reserve components are not properly manned, trained and given modern and compatible equipment then we do not have a Total Force and will be unable to fulfill the missions assigned to the reserve components in peacetime or in times of crisis.

The question of balance between the active and the reserve components focuses on the assignment of roles and missions in peacetime. Upon mobilization the term reserve for all intents and purposes disappears. The Defense Department in conjunction with the State Department continuously reviews the requirement and extent of our forward deployed posture which in peacetime is in large part, although not exclusively, the province of the active forces. The assignment of missions to the Guard and Reserve must involve careful weighing of the requirements for forward deployed forces in peacetime and must also recognize that Guard and Reserve forces will be required for mobilization and deployment on very short notice in the event of international crisis. The decision process that will enable us to establish the best mix of our active and reserve manpower assets is therefore of tremendous importance.

We have worked with the Assistant Secretary of Defense (MI&L) during the year in the preparation of the Congressionally mandated reports dealing with this decision process and the composition and capabilities of the Guard and Reserve. These reports have been forwarded to the Senate Armed Services and Appropriations Committees. They underscore the need for a clearer and more definitive means of determining the total force mix. The services and OSD are fully aware of this need and have made progress in this area. I am assured that the results of this effort will be reflected in the Department's planning and programming review.

The treatment of comparative costs between like units of the Active, Guard and Reserve is an important element in the force mix decision process. Obtaining proper comparative data has been difficult and much work remains to be done in this area. There is, however, general agreement that units in the reserve components cost less than like units in the active forces. While this is true for the most part, it is also recognized that the cost differences vary greatly depending upon the types of units and the tempo of operations demanded of them. There may be additional up-front costs associated with assignment of units and missions to the Guard and Reserve. For example demographic factors may dictate locating a Guard or Reserve unit where it can be best supported by the population base rather than where it might operate most efficiently from a purely military point of view. Such costs should not deter us from making active/reserve mix decisions, but, neither should those costs be ignored.

Modernizing the equipment of the total force is perhaps the most difficult issue we face today. The costs are enormous but the momentum to fully and adequately equip the units of the Guard and Reserve must continue if we are to have an effective and cohesive Total Force. If the units of the Guard and Reserve are given adequate resources for equipment as well as for training, maintenance and operations they can be counted upon to fulfill their role in the national defense.

I am convinced that as we continue to seek ways to improve the efficiency and employment of our Guard and Reserve we will, at the same time, improve the total capabilities of our national defense establishment and that of course remains our foremost aim.

Mr. Chairman this completes my testimony. I am grateful for the opportunity you have given me to appear before you today and I am prepared to answer any questions you may have.

EDWARD J. PHILBIN
Deputy Assistant Secretary of Defense (Reserve Affairs)

Nominated by President Reagan on June 5, 1981, to become the Deputy Assistant Secretary of Defense (Reserve Affairs), and confirmed by the Senate on June 15, 1981, Edward J. Philbin is the highest ranking appointee in the Department of Defense with specific staff responsibility for the management of the nation's Reserve Components. The scope of his duties includes providing direction to all of the Reserve Components, and representing their needs and capabilities within the Executive Branch and before appropriate Committees of Congress.

Mr. Philbin's appointment is the culmination of a 31-year Reserve career, which began in 1949 with 5 years of service as an enlisted Naval Air Reservist. Mr. Philbin credits the experience of those years with providing him a realistic perspective of and sensitivity to the motivations and needs of the junior enlisted reservist. Commissioned from the Air Force Reserve Officer Training Corps at San Diego State University, he then served two years on active duty with the Air Force as a navigator and bombardier. His subsequent continuous Reserve service includes 41 months of command experience, over 1,000 flying hours, duty in Vietnam and, after being designated a Distinguished Graduate of the Class of 1978, selection as the first Reserve Officer appointed to the faculty of the Air War College. Mr. Philbin has served numerous regular and special tours of active Reserve duty, most recently as staff officer and Director of Research for the Secretary of Defense Reserve Forces Policy Board where, during 1980, he coauthored a major study entitled "The Reserve Forces in the 1990's." Mr. Philbin was promoted to Colonel in the Air Force Reserve in June 1980 and, in accordance with the policy of screening key personnel from the Selected Reserve, was transferred to the Standby Reserve upon appointment to his present position. His military awards include the Legion of Merit, Meritorious Service Medal, and the Navy and Air Force Commendation Medals.

Born in New York City in 1932, he was awarded a Bachelor of Science in Mechanical Engineering from San Diego State University in 1957, and in 1965 received his Juris Doctorate, summa cum laude, from the University of San Diego School of Law. Mr. Philbin entered the practice of law in 1966 from a career of engineering and physics in the fields of aircraft and space systems design and weapons research. He became a partner in a law firm in San Diego, specializing in civil litigation. He joined the University of San Diego School of Law faculty in 1970, served as an Assistant Dean, and became a tenured Professor of Law in 1973

He is the author of over two dozen articles and studies in the fields of engineering, physics, law, and military affairs. The recipient of numerous academic, civic, professional and military awards, he received the National Geographic Society's General Orvil A. Anderson Award for excellence in political-military thought for his research study at the Air War College in 1978.

1 December 1981

NATIONAL GUARD BUREAU

STATEMENT OF LT. GEN. EMMETT H. WALKER, JR., U.S. ARMY, CHIEF, NATIONAL GUARD BUREAU

RELIANCE OF NATIONAL GUARDSMEN

Senator **RUDMAN**. General Walker.

General **WALKER**. Thank you, sir.

Mr. Chairman, I have submitted a prepared statement, which I would like to be made part of the record. Also, with your permission, I would like to make a short formal statement.

Mr. Chairman, and members of the committee, I am convinced that the more than one-half million Army and Air National Guardsmen of today have proven themselves equal to the challenge of being a full partner in the total force.

With the defense needs increasing every day, greater reliance has been placed on the Guard and the mission it performs. We furnish a substantial part of the Army's and the Air Force's ability to perform their peacetime and wartime missions.

Today the Guard provides 46 percent of the combat capability of the total army, and 37 percent of the support units. The Air National Guard furnishes 66 percent of the air defense forces of the Air Force, 54 percent of the reconnaissance of the Air Force, and 70 percent of the combat communications of the Air Force. Every day we are considered for new roles and missions.

Sometimes I think, Mr. Chairman, that the people forget, or they ignore, or they simply do not know what the Guard's young men and women can accomplish and what they mean to the defense of this Nation. We have proven our worth with our outstanding successes. These successes make me confident that we can perform and will perform any mission for which we are tasked, as long as we are properly resourced.

The types of successes to which I refer are the Air National Guard this past year was in first place in five major areas of Air Force competition: tactical airlift, maintenance, reconnaissance, aerial refueling, and engineering. The Army National Guard, for example, took first place in 11 of 13 of the pistol and rifle competitions at the national level.

NUCLEAR CAPABLE ARTILLERY BATTALIONS

One thing of interest that I can report to you is that the Army National Guard nuclear capable artillery battalions, for the first time, were tested by the Active Army in the ARTEP program. These 26 battalions that were tested exceeded the 80-percent fire mission standard with an overall average of 96.5 percent. Additionally, 12 units scored 100 percent of the mission fired to standard.

I am proud of these Guard members. They are professional. They are outstanding soldiers and airmen.

Mr. Chairman, and members of the committee, the budget proposal that we have submitted is in my opinion the minimum essential for us to continue to meet the challenges in materiel and personnel readiness that you want us to obtain.

Today, the Guard is at its highest state of readiness in the 347 years of its history, and that is due in large part to the support provided by this committee and the members of the entire Congress. I can promise you in all good faith that we will continue to give you our best, and we will attain that readiness that this Nation deserves from us.

With those short words, Mr. Chairman, I will be pleased to answer any questions that you may have.

[The prepared statement of General Walker follows:]

PREPARED STATEMENT OF LT. GEN. EMMETT H. WALKER, JR., USA
CHIEF, NATIONAL GUARD BUREAU

INTRODUCTION

The Guard is unique from all other services in that it has two missions -- Federal and State.

The Federal mission is to develop and maintain combat readiness -- to, if called, become one with our active counterparts, cohesive fighting units, capable of winning any conflict and bringing it to an end on terms acceptable to the United States.

Army and Air National Guard contributions to the Total Force include 46% of the Army's combat units and 37% of its support forces as well as 66% of the Air Force Air Defense forces and 75% of its combat communications and air traffic services. Based on our manning levels, percentage of equipment fill and active Army and Air Force evaluations of the training we conduct, I can say to you that the National Guard today is more combat ready than at any other time in our 347 year history.

Our current readiness posture is the result of the professional and diligent efforts of many people -- elected officials at national, state and local levels, the Congress, the Departments of Defense, Army, Air Force and the more than one-half million Guard members nationwide. Maintaining and/or increasing the readiness of the Guard requires continuing careful attention to five areas I consider to be vitally important to our ability to perform our critical National defense missions: manning, training, equipping, readying of the Guard and the management of change.

As we move further into the decade of the 80s, the management of change promises to present our greatest challenge. Increasing missions, equipment modernization, the decreasing recruiting pool and increased training requirements will have a profound effect on the way we conduct business. The specifics of each of these areas are addressed in detail in the text.

The past year has seen and the future holds promise for increased involvement with the Drug Enforcement Administration, Selective Service Administration, Federal Emergency Management Agency and the Immigration and Naturalization Service. We are proud of our record of support to these agencies and will continue to support them to the best of our ability.

More than 10,600 Guard personnel, requiring 60,300 mandays answered calls from their respective Governors 511 times in 48 states during 1983. These Army and Air Guard members responded to earthquakes, hurricanes, public demonstrations, strikes, drug control operations, forest fires, floods, snowstorms and a multitude of other disaster and emergency relief requests.

The Guard is called in these situations because they are a trained and disciplined force capable of responding to a wide range of contingencies. The Several States fund such call ups and derive the benefits of the services provided. The Guard, too, benefits. State missions provide our people experience frequently unattainable during drill periods or annual training.

The National Guard is willing and able to meet the many challenges of timely and effective response to emergency situations and stands ready to do so wherever and whenever needed. We view this as an obligation and opportunity -- an obligation to provide the American taxpayers a return on their investment in the Total Force and an opportunity to contribute our skills and resources to the communities and nation we serve.

ORGANIZING THE GUARD

ARMY NATIONAL GUARD

The Department of Army is responsible for organizing and structuring the Total Army to meet wartime requirements. The National Guard Bureau in coordination with the State Adjutants General participates with the Department of the Army in determining units to be organized in the ARNG force structure.

Significant force structure actions in the ARNG since 1981 include the activation of an additional armor brigade from existing force structure, addition of two divisional nuclear, biological and chemical defense (NBC) companies, activations of a divisional combat support aviation company, and air traffic control headquarters, a medical battalion headquarters, an ammunition battalion headquarters with three conventional ammunition companies, an infantry battalion (Mountain) headquarters, a mountain school, reorganization of state ARNG headquarters to State Area Commands (STARC), reorganization of aerial intelligence surveillance units to an Electronic Warfare Intelligence Aerial Exploitation Battalion(-) and the establishment of the ARNG's first units in Guam, a military police company and two engineer detachments.

FY84 force structure actions include the activation of the 35th Infantry Division (Mechanized) headquarters located at Ft. Leavenworth, Kansas. The core of the division will be formed from three existing separate combat brigades from the states of Kansas, Nebraska, and Kentucky. The additional structure will come from the conversion of some existing non-divisional structure and new activations in Kansas, Colorado, Nebraska, Kentucky and Missouri. Activation of the Total Army's only ROLAND battalion in the New Mexico ARNG marks the first time that the Guard has received a weapon system not previously fielded by the Active Army. A divisional roundout brigade and an additional roundout battalion were added in FY 84 increasing the total furnished by the ARNG to five and seven respectively.

The increase in ARNG force structure planned for FY85 is considerable when compared to previous years. Force structure changes include transfers of Active Component units to the ARNG, activations of new units, and conversions of existing units. Examples of the types of units being transferred and/or activated include engineer, artillery, transportation, forward support, and field service units. A divisional support command headquarters for the 35th Division will be activated. Detailed planning was begun in FY83 for the reorganization of nine state owned/operated training sites which are also mobilization stations. The purpose of the reorganization was to provide continuity in the transition from peacetime to mobilization for those mobilization stations. The Installation Support Units (ISU), as the sites are called, will perform a training mission and a mobilization and deployment planning mission in peacetime. The ISU will operate the mobilization stations upon mobilization. The ISUs are programmed to be resourced over several fiscal years beginning in FY85.

Future plans include an even greater role for the ARNG as a partner in the defense of this country.

AIR NATIONAL GUARD

Air National Guard flying units are organized into 24 wings, 67 groups and 91 flying squadrons. The continued strong support of the active Air Force is permitting us to replace older, less capable aircraft with more modern and sophisticated weapons systems.

As a result of these modernization efforts, Air National Guard flying units continue to make a substantial contribution to the Total Air Force combat capability and will fulfill a large portion of force commitment during any future, serious crisis. In FY85 the Air National Guard will possess 68 percent of the Total Air Force Air Defense Interceptor forces; 51 percent of Tactical Reconnaissance forces; 33 percent of Tactical Airlift forces; 25 percent of Tactical Fighter forces; 16 percent of Aerial Refueling forces; 14 percent of the Rescue and Recovery forces; 15 percent of Electronic Combat forces; and 28 percent of Tactical Air Support forces. In addition, 15 Air Guard flying units are tasked in Central Command's (CENTCOM) plans, formerly the Rapid Deployment Joint Task Force.

The continuing emphasis on modernization and readiness has resulted in adjustment of the organization precedence ratings for all Air National Guard units to equal levels with comparable Air Force units. This is in consonance with Department of Defense policies and places the Air National Guard on an equal footing in the DOD Logistics System with its active counterparts.

Equally important to the success of the Air National Guard mission are our mission support units. There are over 248 independent units heavily concentrated in the areas of fixed communications, combat communications, weather, tactical control, engineering installation, civil engineering, medical and air base defense.

Eighty-one base communications flights provide fixed communications support to our flying units, operating and maintaining the base fixed and tactical telephone systems, base communications centers, ground-to-air radios, intrabase radios, HF radios and base cable plants. Many of these flights also have separate deployable elements which support SAC, MAC and TAC at alternate recovery bases in the CONUS and at collocated operating bases (COBs) in Europe. Eight additional flights are to be activated in FY84 in support of ADTAC gained Air Guard flying units.

Our 51 combat communications units are equipped and staffed to support the Tactical Air Forces. They provide specific communications service to forward deployed commanders and provide restoral service to the Defense Communications System. They are also equipped to provide terminal air traffic control facilities and services. As of the end of FY83, 15 combat communications units are tasked in CENTCOM plans to support the RDJTF.

The Air Guard has 39 weather flights and one weather squadron, most of which provide weather support to Army Guard and Reserve units. We do have one weather flight tasked to support the Air Force Tactical Weather System. Weather units train with the Army units which they are tasked to support.

Our 28 tactical control units operate control and reporting centers and posts in addition to providing forward air control posts. All units have wartime taskings and quick response deployment schedules. Twenty-six of these units now possess the TPS-43E Radar. The two new air support radar teams added in FY82 became operational in FY83. Each unit is equipped with new TPB-1C tactical radar. The units are managed by three Group Headquarters.

We also have three aircraft control and warning (ACW) squadrons which provide 24-hour per day air surveillance radar coverage for Hawaii and Puerto Rico. In FY84, a fully automated Regional Operational Control Center will be operational in Hawaii and will be operated and maintained by Air Guard personnel.

Our 19 engineering installation squadrons (EIS) are equipped and trained to engineer, install, relocate, remove, restore and accomplish on-site depot level maintenance on radars, antennas, cable plants, radios, and teletype and communications centers. They maintain proficiency by augmenting the Active Air Force on communications-electronics-meteorological (CEM) facility requirements worldwide.

Our 8 civil engineering flights are equipped to undertake construction, alteration and repair projects to sharpen these skills for their wartime mission as well as completing urgently needed projects for those host bases (either active Air Force or National Guard). The recently established Prime Ribs (Readiness in Base Service) teams currently make up 28% of the total wartime tasked food service and base services personnel.

The Air Guard Medical Service supports our 91 flying units and readiness requirements of the Air Force Medical Service. Additionally, there are nine aeromedical evacuation units. The medical units consist of 26 to 50 personnel depending on the size of the flying unit supported. The aeromedical evacuation units are programmed to support the Military Airlift Command (MAC) during tactical aeromedical evacuation scenarios. There are seven flights consisting of 12 crews each and two squadrons consisting of 25 crews each.

We have formed two dedicated Air Base Defense Flights and one Squadron Headquarters. In FY85 we will have 1 squadron and 7 flights. They are the first of these units and the Air Force program calls for us to have 69 flights and squadron headquarters. These Air Base Defense flights will protect overseas essential wartime facilities from enemy ground attack.

MANNING THE GUARD

RECRUITING ADVERTISING

Our consolidated advertising program budget request for FY85 is $11.45 million. This is a very cost effective program. The ARNG expends $80 per recruit and on the ANG side the cost per accession is $152.

The advertising program is so cost effective because our recruiters continue to benefit from local television and radio public service announcements as well as localization of NGB produced advertisements and media materials.

ARMY NATIONAL GUARD

The ARNG has continued to pursue its aggressive program for increasing strength, concurrent with the expansion of ARNG structure. Fiscal Year 1983 closed with an ARNG paid strength of 417,178, including 41,678 officers and 375,500 enlisted personnel. This represented the successful achievement of over 100 percent of ARNG programmed end strength, 97 percent of authorized strength and 92.5 percent of the wartime requirement. At the same time that these gains were being made, the overall quality of the force continued to improve. Test score category IV accessions decreased significantly from 11.8 percent in FY82 to 6 percent in FY83---well within the objective of 20 percent.

Support of our strength program remains key. Strength increases and quality gains are in large measure attributable to the efforts of the ARNG full-time recruiting force, programmed to number 2534 by FY85. The 103 additional recruiters will be employed to meet a tougher recruiting environment characterized by an improved economic climate and a decreased manpower pool of 18-21 year-olds (9.6 million in 1985 - down from 10.8 million in 1979). The Selective Reserve Incentive Program (SRIP), designed to support quality fill of critical skills and high priority units, will remain an essential ingredient for meeting strength objectives. It is absolutely essential that SRIP be continued beyond the expiration of current authorizing legislation at the end of FY85. The ARNG advertising program further enhances total strength in attracting and maintaining public interest and support. Retention of first term enlisted soldiers was 109 percent of objective for FY 83 and 101 percent for careerists. Within that success, however, as the force grew and the economy improved, ARNG losses prior to the completion of enlistment contracts (or non-ETS losses) have started to increase. During FY83, the non-ETS loss rate rose from 15.7 percent to 16.8 percent. The current force of 258 ARNG full-time retention Non-Commissioned Officers (NCOs) is working to improve retention by resolving conflicts with employers and family members; their major thrust, however, is to reinvolve unsatisfactory and absent members. The 99 additional retention NCOs being requested for FY 85 will reduce non-ETS losses to 15.6 percent. Though this reduction in the non-ETS rate appears to be small, it will result in approximately 3,400 current members being retained in the ARNG. This represents an excellent return on investment as 3,400 fewer accessions will be required, resulting in savings of nearly $10.0 million based on an average accession/training cost of $6,700. We expect to meet our retention objectives through the efforts of these retention NCOs and by continuing a strong strength management education and training effort to involve all leaders in the retention program.

The percentage of minorities in the U.S. population is approximately 16% with a minority population of 25.6% in the 17 to 34 age group. At the end of FY83, minority strength in the ARNG was at 107,099, equating to 25.6% of total ARNG strength. Broken down, this figure includes 3,877 minority commissioned and warrant officers, and 103,222 enlisted members. The ARNG has experienced a .2% drop in minority representation since FY82, however the actual minority strength in numbers has risen by 1,491. The percentage drop is attributed to the increase in overall ARNG strength.

Officer programs have continued to contribute quantity and quality to the ARNG strength gains. Accessions have been steadily increasing and have now reached the programmed level, just under that authorized by the force structure. At the end of FY83, commissioned and warrant officer strength reached 41,678 or 99.7 percent of the budgeted program of 41,800, and 97.5 percent of the 42,759 authorized force structure. Although the recruiting and retention of medical specialties, particularly physicians, remains a concern, the fielding of the Army Medical Department full-time recruiting force resulted in a significant increase in accessions--120 in FY82 and 161 in FY83.

The flow of officers from the Reserve Officers Training Corps (ROTC) has increased from approximately 10 percent of ARNG officer accessions in 1979 to 34 percent in 1983. ROTC accessions are programmed to increase to 40 percent of total accessions by FY89. The State Officer Candidate Schools (OCS) remain the primary source of career officers and best meet the particular needs of geographically dispersed units.

With a good officer strength posture in FY84, the ARNG is focusing on improving the quality of its officer corps. Increased civilian education requirements for officers implemented in FY83 are expected to contribute significantly to this goal in FY84 and beyond. Minimum officer education requirements for OCS applicants will gradually be raised from the current requirement for a high school diploma to two years of college for the 1989-1990 State OCS class. All officers appointed in the ARNG after 30 September 1983 are required to have a baccalaureate degree to be considered for promotion to major. Additionally, all ARNG commissioned officers will be required to have a minimum of two years of college by 1 October 1989. Success of these educational initiatives is dependent upon ARNG efforts to provide tuition and other types of educational assistance to its members similar to that now available for Active Army members. The ARNG and the Army Reserve are seeking authority and funding to begin providing educational assistance to their members in FY85.

The ARNG Captains to Europe program, begun in 1980, has continued to provide an opportunity for ARNG captains to gain experience with the Active Army in Europe while on a 20-30 month tour of active duty. The program has expanded to include Panama and Korea and has provided training for over 117 captains in brigade and smaller units. The Active Component also benefits from this program--one young ARNG captain developed and implemented the M1 tank fielding program for US Army Europe while another developed the USAREUR adopted counter-terrorist program.

Another major element of manning is the full time support force. Traditionally, ARNG military technicians have been the primary source of full time support. For many years, they have provided the continuity for unit operations between monthly drill periods in the administrative, supply, maintenance, and training areas. Prior to the passage of the FY84 DOD Appropriations Act, ARNG military technician program growth had been negligible, increasing from 22,247 in FY81 to 22,742 in FY83. As a result of FY84 Congressional action, the ARNG military technician floor was raised from 22,557 in FY83 to 24,119 in FY84, an increase of 1562 technician positions.

Before FY81, the only ARNG members on active duty tours served in the area of recruiting and retention and in positions at the national level. Based upon the Defense Manpower Commission report of 1976 and Congressional actions in 1979, the ARNG began to add full time military personnel and convert military technician positions to full time military positions. These programs have evolved into today's Active Guard/Reserve (AGR) program. Personnel on full-time military duty in the AGR program generally come from the same source as ARNG technicians, i.e., members of the ARNG who are local residents and who have long term ties with the unit and the community. This is unique to the Guard as AGR personnel serve in a state control status until federalized.

The Full-Time Manning (FTM) program, which is part of the AGR program, has the following objectives: to provide additional military personnel to assist unit commanders in the transition to a wartime posture by improving training, administration, logistics, and maintenance; to improve readiness capability in early deploying units; and to assist in improving mobilization capabilities at the unit level. Through FY84, the FTM program has grown to a level of 6,253 ARNG AGR personnel and 839 Active Component personnel.

The FY 84 appropriation includes a total of 16,632 AGR personnel. The FY 85 budget request includes growth of 9,951 personnel in the AGR program to 26,583 and will improve our ability to achieve ARNG readiness objectives. Approximately 94 percent of the growth is in the FTM program (3,588) and in the Readiness Support program (5765). Six hundred of the AGR-FTM positions will replace Active Component FTM personnel as they are phased out of the FTM program and return to Active Component units. The balance of AGR-FTM growth (2988) will provide additional personnel for company-size units and intermediate staff and will be assigned based on deployment priority. The increase in the Readiness Support program provides for a wide variety of initiatives including programs to develop new organizational structures while modernizing forces, identifying and establishing aviation training sites, improving personnel support, and identifying the initial increment of full-time unit support considered necessary to adequately support the ARNG. This number is considered the minimum necessary to support the FY85 requested force of 447,283 soldiers and associated equipment that will equate to 57 percent of the Active Component strength and 39 percent of the Total Army Force inventory of artillery, combat vehicles, and other major items of equipment.

AIR NATIONAL GUARD

The Air Guard achieved a military end strength of 102,170 in FY83. This is the highest level ever achieved and the fifth consecutive fiscal year that programmed end strength levels have been exceeded.

The Air Guard's FY84 end strength program is 98,189 drill strength and 5,915 AGR (Active Guard/Reserve) for a total of 104,104 with an average strength of 103,400. In FY85, we have programmed 100,666 drill strength and 7,224 AGR for a total end strength of 107,890 and an average strength of 106,200. This strength level supports approximately 99 percent of the Air Guard's projected wartime requirements.

Although the Air Guard has consistently exceeded programmed strength levels, many critical skills remain below acceptable levels. At the end of FY 83, 52 percent of our vacancies were in hard-to-fill areas such as aircraft maintenance, munitions systems, aircraft armament, and security police. Additionally, the Air Guard has projected growth of over 14 percent through FY 89. Of this growth, 35 percent will be in such critical skills as aerial port, Red Horse (civil engineering), aeromedical, and air base defense. We expect to continue to meet our strength goals but anticipate a challenge as our strength levels increase and the recruitable age population decreases.

The Air Guard's recruiting program uses a precision recruiting approach, which keynotes recruiting for existing or projected critical skill vacancies. The overall responsibility for recruiting rests with the respective state or territory. The addition of a full-time retention force has paid off as losses again declined last year. We continue to focus on recruiting rated officers, medical officers, minorities and women. In fact, the percentage of women and minorities in the Air Guard increased again in FY 83 for the third consecutive year. The continuation of recruiting and retention as co-equal programs has aided the Air Guard in meeting its end strength objectives as well as furthering our progress in reducing critical skill vacancies.

At the end of FY83, minority strength was at 14,874, equating to 14.5%. This figure represents 898 minority officers and 13,976 minority enlisted members. While the ANG has experienced a .1% decrease in minority strength the aggregate has increased by 172. Like the Army, the decrease is attributed to the increase in overall ANG strength.

In FY 83, the Air Guard exceeded its combined military technician and full-time military active duty (Active Guard/Reserve) end strengths. We expect to fully meet our FY 84 end strength programs which are 1,238 higher than FY 83.

As a result of the Congressional floor on military technicians in the Reserve components, the number of military technicians will remain constant through FY 84 and FY 85. However, we have programmed 1,309 additional AGR positions in FY 85 to fill increased requirements associated with aircraft, equipment, and other support requirements of the Air Guard.

We will continue to evaluate our future manpower needs and anticipate that future budgets will contain a mix of technician/AGR growth based on cost effectiveness and combat readiness.

EQUIPPING AND SUSTAINING THE GUARD

ARMY NATIONAL GUARD

Lack of equipment on hand and maintainability problems associated with older equipment currently found in the ARNG inventory are the two primary reasons for readiness shortfalls. Equipment shortages are by no means unique to the ARNG--they exist throughout the Total Army. At the start of FY84, equipment needed by the ARNG to meet full wartime mobilization requirements was valued at $25.0 billion (includes procurement funded items only). To meet this wartime requirement, equipment valued at $13.1 billion was on hand in ARNG units leaving a shortfall of $11.9 billion. These figures are substantially larger than the $4.7 billion shortfall figure reported to Congress at the start of FY83, reflecting a more realistic picture and result from costing the inventory and shortfall based on modern equipment replacement costs and current dollar pricing. The $4.7 billion figure was based, for example, on the procurement cost for M48A5 tanks in units which had that model of tank and were short the number required by the unit TOE. That shortfall is now based upon the cost of filling the requirement with an M1 Abrams tank.

The Active Component is committed to providing modern equipment to ARNG units in support of both peacetime training and wartime requirements. Evidence of this commitment is reflected by the decision to provide modern equipment to ARNG roundout units concurrently with modernization of the parent Active Component unit. This has accelerated the modernization process in many ARNG roundout units. Examples of modern equipment issued are M1 Abrams and M60A3 tanks, Bradley Fighting Vehicles, and Improved TOW Vehicles. Receipt of this new equipment causes the displacement of equipment currently on hand to other lower priority units, either to fill unit shortages or provide a more modern set of equipment.

In FY83, equipment issued by the Active Component to the ARNG through normal supply channels in FY83 totaled $370 million, an increase of nearly $100 million over the FY82 level of $271 million. Projections by DA indicate that $611 million worth of equipment will be delivered to the ARNG in FY84. The Active Component is committed to procure nearly $1 billion worth of equipment for the ARNG as a result of FY84 appropriations. Significant deliveries of this equipment are scheduled to occur in the FY86-87 time frame.

It is imperative that we have weapons systems capable of defeating the high density armor of Soviet Pact forces. Modernization initiatives for the ARNG helicopter fleet since FY80 have resulted in the ARNG receiving by FY85 150 AH-1Ss against a total requirement of 409 AH-1S aircraft. Most ARNG aviation attack units are equipped with the UH-1M aircraft, a Vietnam vintage attack helicopter which has neither the armor defeating TOW system nor an all weather capability. Delivery of AH-1S aircraft has provided ARNG aviation with both capabilities.

Additional equipment has also been procured for ARNG units from Congressionally dedicated funding. The ARNG has received newer generation communications equipment, 5 ton cargo trucks, armored personnel carriers, tactical communications equipment, COBRA helicopters and C-12 aircraft. The ARNG will use the $100 million of dedicated procurement funds provided by Congress in FY84 for procurement of tactical communications equipment, fuel tankers, Commercial Utility Cargo Vehicles, night vision goggles, and Decentralized Automated Service Support System (DAS3) computers. This is in addition to $45.8 million for upgrade of AH-1G helicopters to AH-1S configuration (COBRA/TOW) and $10.5 million for 23 company sets of Multiple Integrated Laser Engagement Systems (MILES) provided within DA procurement appropriations and specifically designated for the ARNG. The delivery of this equipment has already improved, and, in the cases of equipment which has not yet been delivered, will improve the equipment on hand status of early deploying units and ensure compatibility with Active Component equipment.

As a result of an ARNG Communications-Electronics Equipment Study conducted in 1982, the problems identified in the areas of interoperability, compatibility, supportability, and deployability have been and are still being addressed at the DA level. Major concerns are with the first generation multichannel Frequency Division Multiplex equipment in all ARNG signal battalions and detachments. DA has directed assessments of the interoperability, supportability, and interface of the first generation multichannel equipment by all major commands.

With $70.6 million of the total of $150 million of Congressionally dedicated procurement funds provided by Congress in FY83 and FY84, the ARNG has been able to initiate procurement of equipment to improve division and corps level communications equipment. Examples of this equipment would be multichannel telephone terminals and radios for corps level units and improved high frequency radios for division level units. In addition, the ARNG is also procuring small unit transceivers and test equipment. This Congressionally dedicated funding is definitely enhancing the ARNG readiness capability.

The ARNG organizational clothing and equipment (OCE) program posture has improved but continues as a major problem area due to the increasing size of the force, new systems being introduced (e.g., body armor, Kevlar helmet, chemical protective overgarment), new requirements (e.g., troops in units located in warm climates being required to be outfitted for cold weather missions), increased emphasis (e.g., one training set of chemical defense equipment (CDE) in addition to one contingency set), the age of on hand OCE, and inflation.

Even with the increases provided by Congress in FY 82 and FY83, ARNG OCE shortages totaled $444.1 million at the end of FY83. Negative program growth of $64 million in FY84 in this critical area will cause the projected backlog to increase to over $508.2 million at the end of FY84. The FY85 budget of $126.5 million will not alleviate the shortfall significantly because, even with increased program growth over FY84 levels, replacement of demand supported items consumed during FY85 will exceed $100 million. Chemical Defense Equipment shortfalls impact on both training and mobilization readiness. Extensive shortages of OMNG funded medical equipment also inhibit the ARNG's ability to achieve readiness goals. Based on increasing OCE requirements, it is difficult to project significant reductions in backlogs in the near future. Priority of issue continues to be to early deploying units.

Expansion of commercial communications services for the ARNG will continue during FY 84 and 85 to support DoD requirements for Intrusion Detection Systems for facilities housing sensitive equipment and communications services required for added full time support personnel. Replacement of antiquated and inefficient telephone systems at State headquarters remains a high priority. Planning and programming to accomplish these actions did not include cost inflation resulting from the uncertain impact of telephone industry deregulation. The impact of this deregulation will be substantial and will require additional resources to support basic telephone service and commercial circuits. By January 1985, all states will have the capability to pass classified data through secure facilities and communications equipment. In conjunction with Forces Command (FORSCOM), planning continues to provide secure terminals at each State Area Command (STARC) by FY86 to provide access to the World Wide Military Command and Control System.

Materiel readiness reports at the end of FY83 revealed that the ARNG equipment readiness posture compared favorably with Army standards. However, some disturbing trends in non-mission capable rates for the ARNG have developed. A contributing factor to these trends is the $138 million shortfall in the FY84 funds needed to purchase repair parts. This shortfall will force a reduction in the stockage of authorized repair parts, resulting in a reduced capability to provide responsive repair parts support and decreased equipment operational readiness. Repair parts requirements are directly related to expanded equipment inventories, equipment age, and to equipment deterioration resulting from the increased use of ARNG equipment to support ARNG, USAR and Active training. The expanded use of ARNG equipment to support Active Component and Army Reserve year round training programs is also a contributing factor to the significantly increased ARNG maintenance support requirements. While most of the equipment in the ARNG is fully supportable and deployable, some of it is old and significantly less capable than equipment in the Active Army. For example, ARNG air defense units are equipped with the 30 year old M42A1 Self Propelled 40mm Gun (Duster), which has become progressively more difficult to maintain due to age, deterioration and the non-availability of repair parts, major components and ammunition.

The FY85 depot maintenance program provides $81.4 million to upgrade and improve aging ARNG equipment including modernization of the M109A3 155mm SelfPropelled Howitzer, conversion of gasoline powered M113 Armored Personnel Carriers to diesel engines and upgrade of the 5 ton wrecker fleet. A program initiated in FY83 to combat serious rust damage to ARNG vehicles will ultimately result in the rustproofing of all tactical wheeled vehicles in the ARNG inventory. The FY85 ARNG depot maintenance program provides funds to support a materiel readiness posture in the ARNG that will continue to compare favorably with established standards.

Upon mobilization, the four ARNG Aviation Classification Repair Activity Depots (AVCRAD) round out the Active Component's world-wide aviation depot maintenance capability, transferring the experience and expertise of ARNG aviation maintenance personnel to the sustainment of Total Army Force aviation immediately after mobilization. In their pre-mobilization status, these units provide aviation maintenance support up to and including limited depot maintenance for the 2500 aircraft in the ARNG inventory. One of the programs in this support mission is a closed loop, aircraft component direct exchange program. Serviceable components are stocked at the AVCRADs. Unserviceable components are sent from units to their supporting AVCRAD, which returns a replacement component to the unit. AVCRADs perform the required repairs on the unserviceable components and replace them in stock, ready for reissue. During FY83, 9,387 components were exchanged, which directly contributed to the ARNG aircraft operational readiness rate of 73%.

Personnel and administrative management information requirements to better manage the ARNG continue to expand. The existing automated ARNG Personnel Reporting System (PRS) can no longer keep up with these fast growing requirements. The ARNG Standard Installation/Division Personnel System (SIDPERS) is designed to fill this void and permit interface with Active Army and Army Reserve automated management information systems. SIDPERS will greatly broaden the management information available to support rapid mobilization, force structure objectives, maintenance of and projections for manning the ARNG, statistical input for logistical funding and readiness, and provide the operations and training information required to meet mission requirements. Implementation of ARNG-SIDPERS will provide the capability to immediately merge ARNG personnel records and data into the Total Army personnel management system upon mobilization. It also will enhance retention through provision of improvements in the military pay system for individual soldiers. The placement of SIDPERS personnel assets in the states to effect the quality assurance program (PRS), establish document audit trails, and train input originators and personnel managers has resulted in a more timely and accurate drill attendance reporting program. SIDPERS personnel will continue preparations for system implementation in Oct 84 while providing the management information required to support the Guard's role in our national defense.

Another sustaining effort is that of operating, maintaining, modernizing, or replacing facilities utilized by the ARNG. This involves a physical plant of 5,010 facilities consisting of 2,822 armories (1,504 of which are over 25 years old), 1,585 logistics facilities, 445 training sites, and 158 United States Property & Fiscal offices and warehouses. These facilities range in size from a 60-person armory in a small community to large training sites with acreage capable of supporting an entire division during a single training period. Under the provisions of the United States Code, facility support varies from 100 percent Federal funding of training sites to full state funding for operation and maintenance of state-owned armories. The Backlog of Maintenance and Repair (BMAR) will continue to increase, based on funds available for the Base Operations program during FY 84. However, the FY 85 budget request includes funds for BMAR reduction which, when coupled with the out years program, would meet the Congressionally mandated containment level of $15.2 million during FY 88. Continuing use of computerized systems is paying big dividends in upgrading the OMNG minor construction and maintenance and repair programs and making them more responsive to Federal and state requirements.

The backlog in construction requirements at the end of FY 83 is valued at $825 million which indicates a leveling off of identified construction backlog. However, this apparent leveling off is deceptive considering the increased aging of the existing physical plant, as noted by the increase in the number of armories over 25 years old and current emphasis to replace World War II temporary buildings still in use at annual training sites. One new initiative entitled Stable Annual Investment for Renewal of Systems (STAIRS) provides new perspectives in assessing priorities during budget cycles to achieve a 2 percent replacement rate for all categories of facilities. Emphasis is being given minor construction projects to upgrade and modernize training site facilities and ranges as one means to maximize limited training time available to ARNG troops. Range developments will be consistent with new weapons entering the ARNG inventory and the Army's combat training doctrine.

The FY 84 Military Construction, Army National Guard (MCNG) program provides for 53 new major construction projects. The minor construction program includes funds to initiate the local training site range modernization program. FY 85's military construction request of $89 million will provide for fifty major construction projects, with 8 additional construction projects released from the major construction program to be accomplished under the expanded authority permitted under Military Construction (MILCON) minor construction. Funds programmed for upgrading local training sites have been doubled from the prior year amount.

AIR NATIONAL GUARD

Modernization of ANG units has continued at a modest pace as evidenced in the FY 1985 Public Announcement of force changes. Our first F-16 unit is combat ready and we have announced the first F-15 conversion for the Air Guard in FY 1986. Future programs continue these modernization efforts. However, I must emphasize two considerations when you review our modernization efforts. Future conversions are programmed conversions which depend on programmed procurement rates. Modernization of the Air Force in general and the Air National Guard in particular depends heavily on your support of these procurement rates.

In FY 85, the ANG will continue its modernization efforts in most major mission areas. One Tactical Air Support unit will convert from O-2As to C-19s and assume a strategic airlift mission. This unit will also be the backup carrier for the Space Shuttle. One Tactical Fighter unit (F-4C) will expand from 18 to 24 primary aircraft authorized, and two F-4C/D training units will expand from 12 to 18 and 44 to 50 primary aircraft authorized respectively. In the Tactical Reconnaissance mission area, three RF-4C units will grow from 18 to 24 primary aircraft authorized. Finally, two Tactical Airlift units will change series from the C-130A/Ds to C-130Hs and one Air Refueling unit will change from KC-135As to KC-135Es.

By the end of FY 84, 12 of the 13 Air National Guard KC-135 units will be equipped with or in retrofit for the JT-3D engine. The JT-3D engine provides our KC-135s with increased thrust and offload capability, an increased combat capability, and a significant reduction in noise and emissions.

The Air National Guard request for the FY 1985 military construction program is $102.9 million. It includes $87 million for major construction, $7.9 million for minor construction and $8.0 million for planning and design. The program is composed of 67 projects at 48 locations in 34 states and provides direct support of weapons system conversions, facilities modernizations, and unit relocation.

TRAINING THE GUARD

ARMY NATIONAL GUARD

As a result of increased reliance on the ARNG as part of the Total Army, major emphasis continues to be placed on training to meet readiness goals, both for individuals and units. Much has been accomplished in improving the training readiness of the ARNG. Much remains to be done.

Increased emphasis has been focused on training in a field environment providing as close to combat conditions as possible and to the levels which combat will demand, i.e., train as we will fight. Our leaders must know how to orchestrate the battlefield to maximum advantage because we will be outnumbered both in personnel and weapons systems. We must be prepared to respond at any time because there will be little time for post-mobilization training.

An established goal of the ARNG is to increase the level of unit training. During FY83, 57 percent of all armor, infantry, armored cavalry, reconnaissance and TOW Light Anti-Tank (TLAT) battalions/squadrons trained at battalion level and above. All units must graduate to combined arms (task force and company/team level) training as this is the way these units will be required to fight. The ARNG has made progress in this vein with National Training Center (NTC) rotations for heavy roundout battalions, limited procurement of MILES equipment, and three week annual training periods for selected units. However, in order for us to improve combined arms training, which takes place primarily during annual training, we must improve our capability to conduct mission-oriented training during drill periods. Factors inhibiting that capability are support for local training areas and a shortage of travel funds to support movement of units to adequate training areas.

In FY83, ARNG units began training at the NTC when an armor battalion from the Georgia ARNG trained there with its aligned Active Component brigade. In FY84, a mechanized infantry battalion will train at the NTC, followed by five ARNG battalions in FY85. Heavy roundout battalions will continue to train there tri-annually. Scheduling of an ARNG brigade task force is being considered for the FY86-87 timeframe. Support of FORSCOM funding programs for ARNG participation at the NTC is, therefore, vital to the ARNG. Funding for an additional week of annual training and preparatory training for participating units is included in the FY85 ARNG budget request. Training for ARNG units at the NTC provides invaluable lessons learned and a unique opportunity to realistically execute missions for which they have trained.

A requirement for Reserve Component nuclear-capable artillery battalions to take a nuclear ARTEP (Army Training and Evaluation Program) and have a technical validation inspection administered was implemented in FY83. In order to successfully complete a qualification ARTEP, a unit must conduct a minimum of 80% of their delivery of fire tasks while maintaining a 70% or better operational readiness in personnel and equipment. Each nuclear capable unit must complete all nuclear level tasks. During the 50 continuous hours of field operations required, a unit must conduct a minimum of five tactical moves of at least 5 km each. Two of these moves must be conducted at night. Twenty-five ARNG battalions were evaluated and the results were impressive. With a standard of 80 percent, the ARNG artillery battalions averaged 95.6 percent. Two units had perfect scores and only two scored below 90 percent. The remainder of the ARNG nuclear-capable artillery battalions will be administered this evaluation, required every three years, during FY84 and FY85.

The AC/RC Partnership Program pairs major combat units of the ARNG with similar Active Component units for training support, evaluation, and assistance. This program was expanded to a $2.9 million program for FY85. A key result of this program has been support for the ARNG force modernization process.

The Army CAPSTONE program aligned Active Component and Reserve Component units based on wartime requirements and allows units to plan and train for their wartime mission during peacetime. Initially developed for European scenarios, CAPSTONE has subsequently been expanded to include the Pacific and the Rapid Deployment Force (RDF). Units will be provided planning and training priorities to allow commanders to focus their training on one contingency mission. The FY85 budget provides funding to support attendance by ARNG commanders at conferences with CAPSTONE aligned units to exchange information and refine operation plans.

ARNG participation in exercises and overseas deployment training serves as a prime means of accomplishing much needed combined arms training and exercising mobilization plans and provides units with training opportunities that are not normally available in the yearly training program. ARNG units are selected to participate based upon their contingency mission (CAPSTONE alignment). Greater emphasis is being placed upon ARNG unit participation to fully evaluate a given operation plan. During FY83, 185 units and unit cells participated in exercises to include deployment of a battalion task force with its equipment to Italy for Display Determination 83. In addition, the ARNG deployed a complete armor battalion to Europe which drew POMCUS equipment and participated in REFORGER 83.

Plans have not yet been finalized regarding ARNG exercise participation in FY85, but more units and unit cells will likely be involved than in previous years. Two battalions, over 400 units and cells and more than 7,000 personnel will participate in ODT in FY84.

The Battalion Training Management System (BTMS) was established in 1981 to ensure that all organizational levels, from squad to battalion, are trained to effectively plan, conduct and manage new training to include the understanding and use of training support materials. The Army's training management doctrine has been incorporated into all levels of the ARNG school system. FORSCOM evaluation reports of Reserve Component units reported a positive correlation between BTMS and "overall AT performance" for company-sized units, underscoring the value of BTMS in developing junior leaders. Statistically, BTMS was the most significant factor influencing overall AT performance. Units which scored well in BTMS performed well overall.

The ARNG has initiated a program to improve the educational qualification of the AGR force and the M-Day force. All AGR officers and NCOs will be required to receive resident training at Active Component schools--trained to the very highest level possible. By receiving the very best training available, these ARNG trainers will be better able to assist unit commanders with training of the M-Day force and to make optimal use of the limited training time available. M-Day personnel are also encouraged to attend Active Component schools to improve their military skills when attendance at such schools can be worked out with employers. Side benefits of such training result in improved ability to perform in their civilian jobs as well.

NCO training in the ARNG today is designed to provide the knowledge and skills necessary to lead, fight, and survive on the modern battlefield. The key to battlefield mission success rests heavily on a well trained NCO force. In 1977, the ARNG instituted an NCO education system. In FY 80, a formalized training program approved by Training and Doctrine Command (TRADOC), the Reserve Component Noncommissioned Officer Education System (RCNCOES), was begun. Participation in RCNCOES programs has increased to the point that 30,000 students are expected to graduate in FY85 with $13.0 million budgeted for the program. Commanders and senior NCOs have stated that significant contributions have been made to the ARNG overall readiness posture as a result of RCNCOES programs.

The Key Personnel Upgrade Program (KPUP) budgeted for $13.3 million in FY85, further develops key personnel in ARNG units through direct association with their Active Component counterparts during tactical training exercises. Initially, participation in KPUP was restricted to personnel in selected units but in FY82, participation was opened to personnel from all ARNG units. This program has become vital to the training readiness of the ARNG.

Training ammunition authorizations in FY84 for the ARNG are 76 percent of requirements ($167 million), a 24 percent increase over the FY83 requirements level. Increases in training unique and pyrotechnic munitions will afford ARNG commanders opportunities to plan for and execute training programs so readiness may be improved. Training with MILES is now being supported at a limited level due to the constrained authorizations of blanks and simulators. Large caliber high cost munitions continue to be authorized at minimum levels which constrain or preclude reprogramming of training not accomplished to standards. This restricts a commander's capability to effect performance oriented training and BTMS techniques.

Indicative of the solid base and depth of the National Guard small arms training programs are the superb accomplishments of our competitive marksmen. Guardmembers won 8 out of 10 matches in the 1983 US Army Rifle, Pistol and Machinegun championships, the team title at the Interservice Pistol Championships, the National Trophy Pistol Team Championship at the National Pistol Championships, and the National Trophy Individual Rifle and the Prone Iron Sight Team championships at the National Rifle championships.

The availability and effective use of training devices continues to be extremely critical to the ARNG. With limited training time and limited access to optimal training sites, use of training devices and simulators is essential for the attainment and sustainment of individual/unit proficiency at the unit armory. As a result of emergent technology, future training devices may be utilized in lieu of high cost munitions. The initial cost of training devices will be high but long term benefits overall will far outweigh those initial outlays. Procurement of MILES equipment for the ARNG in FY84 will have a positive impact on training. However, limited resources exist to address ARNG requirements and shortfalls remain.

The modern weapons coming into the Army inventory are far superior in distance, accuracy, and destructive power compared to the weapons being replaced. Modernization of ARNG local training areas and ranges needs to be accelerated to keep pace with distribution of modern high technology weapons systems to the ARNG. Ranges need to be enlarged and designed for multiple purpose use to accommodate introduction of sophisticated training devices such as lasers, simulators and modern target systems. Additional resources are required to support improvements in training sites and ranges if ARNG units are to meet critical training requirements for pre-mobilization as well as post-mobilization.

Over 30 percent of the Total Army Force's combat aviation assets exist in the ARNG. ARNG aviators are required to meet the same minimum annual flying requirements and standards as their active counterparts. The challenge to ARNG aviation in the 1980s is to meet the individual and crew requirements identified by the Aircrew Training Program and also to train as an element of the combined arms team. To help alleviate this increased training workload and allow aviation units to concentrate on unit and combined arms training, an ARNG Aviation Training Site (AATS) Program was developed. The program was designed to complement current aviation training efforts. The Eastern AATS (EAATS), the first of two AATS, became fully operational during FY83. Its mission is to conduct ARNG individual aviation qualification training not provided by the US Army Aviation Center, but essential to the readiness of ARNG units. The EAATS program will provide post graduate flight training for over 500 aviators per year. The Western AATS is scheduled to be operational during FY87 with its primary mission of supplementing unit tactical training requirements with emphasis on aerial gunnery and attack team training.

The ARNG has experienced an increase in Undergraduate Pilot Training (UPT) quotas from 140 in FY82 to 224 in FY83. The ARNG utilized all UPT quotas during FY83. These quotas will increase during the 1980s and will eventually provide an output of 250 ARNG aviators per year by FY89. The ARNG has seen positive results over the past 2 years since imposing a restriction of 27 1/2 years of age to apply for Initial Entry Flight School. The tradeoff for our highly experienced force of aviators is its steadily increasing average age. The ARNG UPT program is solving the "Aging Aviator" problem and establishes a 20 year life-cycle aviator management program.

In support of vigorous training programs, the ARNG safety/accident prevention efforts are targeted toward the prevention of motor vehicle accidents and personal injuries. Special emphasis countermeasure programs during FY83 impacted on the reduction of both motor vehicle and training accidents. The FY83 overall accident rate was 1.76 accidents per 200,000 hours of personnel exposure, down from the FY82 rate of 4.2.

The ARNG aviation accident rate in FY83 was 2.00 accidents per 100,000 flying hours, an increase from the FY82 rate of 1.01 which is the lowest rate ever achieved in the ARNG. The FY83 rate compares favorably with a 2.50 aviation rate Army-wide. Aviation safety awareness through better communication with field organizations became a primary goal in FY83. An analysis of the accident experience indicates that human error ranks as the number one factor. To reduce the accident rate, formal safety training and education were emphasized. To fill an obvious void in the safety training system, the ARNG Aviation Mishap Prevention Orientation Course (AMPOC) was developed and taught twice during FY83. To complement increased awareness, the Regional Accident Prevention Survey Program (RAPS) was totally implemented in FY83. RAPS is a self-help type program to accomplish annual accident prevention surveys of all ARNG aviation facilities. All facilities successfully participated in RAPS during FY83.

The National Guard Professional Education Center (PEC) provides uniform, centralized training for full-time support personnel as it relates to ARNG programs and to increase the capability of those individuals to perform their jobs on a day-to-day basis. Among the training offered at PEC are courses for Unit Administrators, Administrative Officers, Operations and Training Readiness Specialists, and Training NCOs. These courses are taught with emphasis on ARNG unique operations, are unavailable anywhere else in the military training arena, provide specialized and very cost effective training, and increase mobilization readiness for the ARNG.

AIR NATIONAL GUARD

Our flying units make significant contributions to the Air Force as a by-product of realistic training. We participate as full partners with other components in overseas deployments, JCS and USAF training exercises, and Air Guard sponsored Composite Force Training exercises.

Our overseas deployments temporarily move entire flying units to theater locations along with ground support personnel, civil engineering, tactical control, and combat communication units. Such deployments furnish the Guard with realistic and valuable theater specific training.

The Air National Guard has tested several deployment concepts in order to validate wartime capabilities and maximize training per dollar spent. For example, we recognize air refueling assets will be extremely limited during wartime. Therefore, in FY 83, the Air National Guard successfully executed an island hopping deployment of 24 A-7s from Ohio to Europe, which eliminated the requirement for any air refueling.

By initiating a policy of joint deployments whenever possible, we save dollars and increase unit exposure to this valuable overseas training. On a joint deployment, two or more units deploy together and share support equipment, thereby minimizing airlift costs.

In the Southern Command region, the Air Guard maintains four A-7s on station at all times in defense of the Panama Canal, supported by ANG KC-135s. We also maintain two Aircraft Control and Warning Radars in defense of Puerto Rico, and we support airlift requirements throughout Central and South America with six C-130 aircraft.

The Air National Guard also supports the Army in exercises throughout the world. Joint training programs, such as the National Training Center at Fort Irwin, California, provide joint training experience for both the Army and the Air National Guard.

To further the ANG fighting capability and familiarize our Air Guard personnel with joint operations, Composite Force Training exercises are conducted throughout the year. These exercises are sponsored and planned by ANG flying units, ANG Permanent Field Training Facilities, and active Air Force units. These exercises encompass all mission areas of the Air Guard and are developed for the specific purpose of providing realistic training for all participants.

In the Pacific Theater, our F-4 aircraft and support personnel from Hawaii participated in Pacific Air Forces exercise Team Spirit 83 in Korea. In addition, Air Guard KC-135 units supported the Strategic Air Command Pacific Tanker Task Force in Guam and Cope Thunder in the Philippines.

In Alaska, our RF-4s have provided photo support for exercises. During the latter part of FY84, over 40 percent of the KC-135 assets to the Alaska Tanker Task Force will be provided by the Air Guard.

To further illustrate the Air National Guard's global readiness and the realistic training received, tactical fighters and reconnaissance units deployed to Germany, Turkey, England and Iceland during FY83. Air Guard KC-135 tankers, participating in the European Tanker Task Force, supported European air refueling requirements.

Such a high degree of operational readiness demonstrates that the Air National Guard, when equipped with modern aircraft and equipment, is a full Total Force partner in the front-line of our defense forces.

Our mission support units have also made impressive strides in this area. In the past three years, our combat communications units have deployed approximately 1,400 personnel to Europe, Honduras, Egypt and Korea in support of major exercises.

Our Tactical Control Units train at their home stations by controlling Active and Air Guard fighter aircraft and by system-wide simulated exercises. As with combat communications, these units also play a major role in JCS exercises. Most noteworthy was the deployment of two flights of personnel to Italy and Denmark in support of a USAFE/NATO exercise. This was the second deployment of a CONUS-based Air Guard tactical control unit to Europe.

Two of our engineering/installation units deployed to Europe in June 1983 and performed successfully under simulated wartime conditions. An Air Guard unit also won the FY83 Air Force Communications Command "SHOOTOUT" competition. "SHOOTOUT" is a series of competitive taskings undertaken by Air Guard and Active Air Force units.

Our civil engineering units also participated in JCS European exercises and performed validation surveys of Air Force European and host nation base complexes. They identified assets, requirements and deficiencies for use by wartime planners.

READYING/MOBILIZING THE GUARD

ARMY NATIONAL GUARD

Since FY81, through the first quarter of FY84, ARNG reporting units have increased their combat readiness by 6 percent in training readiness, 2 percent in Military Occupational Specialty (MOS) qualification readiness, and 5 percent in personnel readiness, while equipment on hand readiness was decreasing by 5 percent. To reiterate the problem with regard to equipment, it is not unique to the ARNG but is a basic problem throughout the Total Army. In spite of the decrease in equipment on hand readiness, for the third consecutive year, the ARNG has maintained an overall combat readiness rate of over 60 percent for all its reporting units. As the Active Army organizes its forces to meet the many worldwide contingencies, the role of the ARNG has increased. More units are being assigned high priority missions and, in some cases, are assigned the requirement to respond to more than one contingency mission. To illustrate the increasingly important role the ARNG has assumed, since FY81, ARNG missions have changed as follows: Intensive Management Force (IMF) units increased from 497 to 1190; units assigned to the RDF have increased five times; Prepositioning of Materiel Configured to Unit Sets (POMCUS) units decreased from 21 to 12 although POMCUS Back-up Forces increased from 6 to 26; Quick Fix Force units increased from 105 to 152; and D to D+30 units increased from 119 to 210. As the review of Active Component missions which could be transferred to the ARNG continues and worldwide contingency needs increase, it can only be assumed that the ARNG's role in the assumption of high priority missions will expand.

The ARNG conducts mobilization exercises to evaluate the ability of units to meet their deployment objectives. Evaluations were conducted for 46 percent of the units selected for ODT in FY82. In FY84 the goal is 100 percent. That goal should be achievable and has been reestablished for FY85. IN FY82, a program was begun to evaluate all IMF units over a five year period and every three years thereafter. While several DA actions caused the IMF to expand, the program is on target. Approximately 250 exercises were conducted in FY83 with a budget of $9.0 million. In FY84 over 300 exercises will be conducted and over 350 exercises are planned for FY85 at a cost of $10.7 million. These exercises focus on the immediate post-moblization tasks to be accomplished by ARNG units and STARCs. IN FY85, 54 STARCs and over 80 percent of ARNG units will participate in a worldwide Joint Chiefs of Staff mobilization exercise. This exercise will provide the opportunity to examine further the mobilization preparedness of the ARNG and, more specifically, the effectiveness of the ARNG exercise program. Although the current program is considered a success, funding is available only for early deploying units. Resources are not provided for evaluating over 60 percent of the ARNG combat divisions, 50 percent of the separate brigades, and 100 percent of the armored cavalry regiments.

Several mobilization initiatives were begun by states during FY83 which have nationwide implications. One of these involved a mobilization exercise which included the rail movement of 145 M48A5 and M60 tanks. The exercise, which was planned and conducted by the Nebraska STARC, involved complex coordination between several government agencies including DOD, Military Traffic Management Command, and Anniston Army Depot. This unique approach provided vital training for ARNG members and staffs and resulted in a savings of approximately $400,000 over conventional methods.

AIR NATIONAL GUARD

I am proud to report to this committee that combat readiness and capability to perform the wartime mission of the Air National Guard was again successfully demonstrated in 1983 by Air National Guard units during Air Force Operational Readiness Inspections (ORIs). These inspections were conducted under realistic wartime scenarios with the majority of Air National Guard units receiving these inspections while at deployed locations. This deployed concept has continued to expand and now includes Air Guard combat communication units. Since the inception of the realistic training scenario in 1976, Air National Guard units have materially enhanced their capability and readiness.

SUMMARY

The Army and Air National Guard have proven themselves to be full partners in the Total Force. The National Guard exists to support National policy while providing to the states a militia uniquely qualified for local disaster and public safety missions.

There will be precious little time to train and equip our forces if called upon to defend our great nation. The Congress and the services have done much to assist in improving our readiness posture. Much still needs to be done.

We have proven that given the proper resourcing and training, the Guard can and will perform any mission it is assigned.

We appreciate the continuing strong support of the Congress, the employers and families of our personnel, and the services. With continued strong support we look forward to an ever more combat ready Army and Air National Guard.

BIOGRAPHICAL SKETCH OF LT. GEN. EMMETT H. WALKER, JR.

Lieutenant General Walker enlisted in the United States Army in December 1942, attended Officer Candidate School at Ft Benning, GA, and was commissioned a second lieutenant, Infantry, on 23 May 1944. He served with the 95th Infantry Division in the European Theater during World War II and was separated from active service in March 1946.

On 22 May 1949, General Walker joined the Mississippi Army National Guard as a first lieutenant. He was promoted to captain on 3 January 1951.

General Walker was ordered to active duty on 16 January 1951 with the 31st Infantry (Dixie) Division during the Korean Conflict and served with the Far East Command Headquarters in Japan until 25 September 1952.

General Walker returned to the Mississippi Army National Guard where he served in several positions. Promotion to major came in February 1955. In December 1961, General Walker was promoted to lieutenant colonel and took command of the 4th Howitzer Battalion, 114th Field Artillery. He became commander of the 631st Artillery Group and was promoted to colonel on 19 February 1968. Appointed Assistant Adjutant General for the Mississippi Army National Guard on 16 February 1972, he was federally recognized as brigadier general, Adjutant General Corps, on 4 August 1972.

General Walker was appointed brigadier general, Army of the United States, and ordered to active duty as Special Assistant to the Director, Army National Guard, National Guard Bureau, on 15 October 1976. He was reassigned as Deputy Director, Army National Guard, National Guard Bureau, and federally recognized as brigadier general of the line effective 17 November 1976.

He was appointed as Director of the Army National Guard on 16 August 1978 and promoted to the grade of major general on 22 August 1978. He was appointed by the President for a four-year term as Chief of the National Guard Bureau and promoted to lieutenant general on 19 August 1982.

General Walker has been awarded the Silver Star, Legion of Merit, Bronze Star with V Device, Meritorious Service Medal, Army Commendation Medal, Good Conduct Medal, and numerous other decorations.

ARMY RESERVE

STATEMENT OF MAJ. GEN. WILLIAM R. BERKMAN, U.S. ARMY, CHIEF OF THE ARMY RESERVE

CONTRIBUTIONS OF ARMY RESERVE

General **BERKMAN**. Mr. Chairman, I am Bill Berkman, Chief of the Army Reserve.

Mr. Chairman, members of the committee, it is a pleasure for me to once again present the fiscal year 1985 Army Reserve appropriation request. I have a statement for the record, which I have submitted, and I have a short summary statement that I would like to present at this time.

Today's Army Reserve is an essential part of the total Army. The Army Reserve provides about one-third of the Army's support forces and significant combat forces. Some kinds of support vital to the Army's wartime missions are found entirely or almost entirely in the Army Reserve.

The point is clear, today's Army Reserve is no mere supplement to the active component, but rather it must be recognized as an essential element of the total Army. Indeed, some Army Reserve units will deploy to theaters of operations well before many units of the Active Army. Moreover, the Army's primary source of fillers and replacements, and cadres for Active and Reserve units is the individual Ready Reserve.

What all this means is that Army Reserve readiness cannot be attended to after mobilization, it must be the object of our close attention and increased effort today.

PAID DRILL STRENGTHS

The number of Army reservists assigned to troop program units, paid drill strength, continues to improve. At the end of fiscal year 1978, Army Reserve paid drill strength stood at a low of approximately 186,000.

Since that time, however, due in large measure to the foresight and the support of the Congress, including this committee, through increased Reserve end strength authorizations and a wide variety of funded strength incentives, such as bonuses and educational assistance, our paid drill strength has steadily grown to a current strength of almost 251,000.

By the end of fiscal year 1984, we expect to achieve our authorized paid drill strength of approximately 258,000. For fiscal year 1985, we are requesting a paid drill end strength of about 270,000, a substantial increase, but still nearly 11,000 personnel short of our peacetime requirements and 36,000 short of the wartime required strength for the troop program units of the Army Reserve.

INDIVIDUAL READY RESERVE

The Individual Ready Reserve, the Army's source of wartime individual replacement and filler personnel for both Active and Reserve component units, also continues to grow in numbers. As of January 1984, the enlisted strength of the IRR stood at about 210,000. We expect improvement in these figures in future years as a result of the recent authority to extend the minimum service obligation from 6 to 8 years.

The 1985 budget request provides for an expansion of the Individual Ready Reserve Reenlistment Program from the 1984 level of 4,000 to more than 11,000 bonuses, as well as establishing a direct enlistment program which is expected to increase the Individual Ready Reserve enlisted strength by approximately 1,200, especially in the combat arms.

Personnel enlisting directly into the Individual Ready Reserve will be required to undergo 2 weeks refresher training in their mobilization skills every 2 years for the term of their enlistment. The budget request also provides for a 26-percent increase in mobilization skill training for non-unit reservists.

READY RESERVE INCENTIVE PROGRAMS

The 1985 budget request also provides a total of nearly $35 million for various incentive programs to increase the strength of the Army's Ready Reserve. All of these bonus programs are tied to quality standards and to specific military skills and specialties.

During fiscal year 1983, those incentives were responsible for providing nearly 22,000 soldiers to Army Reserve units. Indeed, the Army is considering expansion of these incentives to respond to further challenges in the recruiting market, and your support for those incentives, of course, will be vitally important.

FULLTIME UNIT SUPPORT PROGRAMS

The 1985 budget request also contains significant increases for Army Reserve fulltime unit support programs. While there may be a small decrease in the Active component personnel in full-time support of Army Reserve units. Active Guard Reserve personnel will increase by more than 5,500 personnel supported by the budget request. This brings the total number of fulltime personnel supporting units of the Army Reserve to about 20,000, or about 7 percent of the total troop program unit strength.

Incidentally, the Army Reserve historically has had the lowest percentage of fulltime personnel of all the Reserve components of the Services.

SUPPLIES AND EQUIPMENT

Supplies and equipment are also an essential ingredient to mobilization readiness of Reserve forces. As a result of congressional interest over the past 3 years, almost all high priority units, early deploying units, are fully provided with their authorized OMAR funded supplies and equipment.

We are currently filling other priority units with essential mobilization equipment, but continued emphasis and growth is necessary if we are to fully stock all mobilizing and deploying USAR units with cold weather clothing and equipment, chemical defensive equipment, and other go-to-war stocks required by their missions.

The Army Reserve as an integral and essential part of the total Army continues to grow in scope and importance. The men and women of the Army Reserve are ready and will continue to be ready to meet their country's call whenever it may come.

Incidentally, less than 72 hours after the decision was made to send Army Reserve civil affairs members to Grenada to support the rescue operation, the first teams had volunteered and were in-country on the ground. We are proud of that response.

With your continued support, the Army Reserve will continue to provide trained units and qualified individuals available in time of war, or national emergency as part of our total Army of excellence.

Thank you, Mr. Chairman.

[The prepared statement of General Berkman follows:]

PREPARED STATEMENT OF MAJ. GEN. WILLIAM R. BERKMAN, USA

CHIEF OF THE ARMY RESERVE

Dear Mr. Chairman and Members of the Committee:

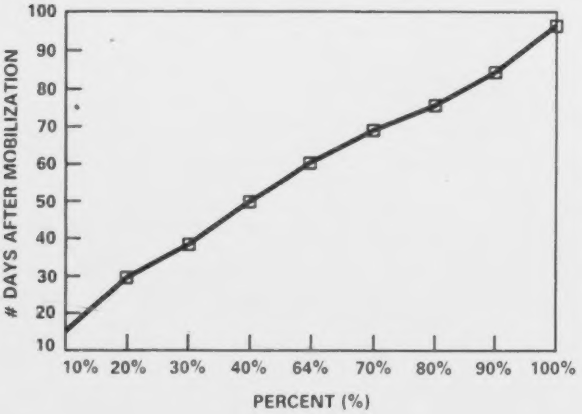
It is a pleasure for me once again to appear before you to present the FY 1985 Reserve Personnel, Army and Operation and Maintenance, Army Reserve appropriation requests. I also appreciate the opportunity to discuss the Army Reserve's programs for FY 1985 and to answer any questions which you may have regarding this vital component of the Total Army.

Today's Army Reserve is more than ever an essential part of the Total Army. It should also be borne in mind that when we speak of the Army Reserve's contributions to the Total Army, we speak of a significant portion of the Army's operational capability. The Army Reserve provides 16 percent of the Army's combat forces, a quarter of its special theater forces, and about a third of its support forces. Some kinds of support vital to the Army's wartime missions are found entirely or almost entirely in the Army Reserve: all of the Army's training brigades and divisions are in the Army Reserve, as are all of its strategic, military intelligence reconnaissance and analysis detachments and its railway units. Nearly all of the Army's Judge Advocate General detachments, civil affairs units, and psychological operations units are Army Reserve assets. More than half of the Army's petroleum supply and handling companies, as well as its conventional communication, maintenance, service and supply companies, and Army hospitals (MTOE), are found in the Army Reserve.

UNITED STATES ARMY RESERVE

PERCENTAGE OF USAR UNITS DEPLOYED

AFTER FULL MOBILIZATION

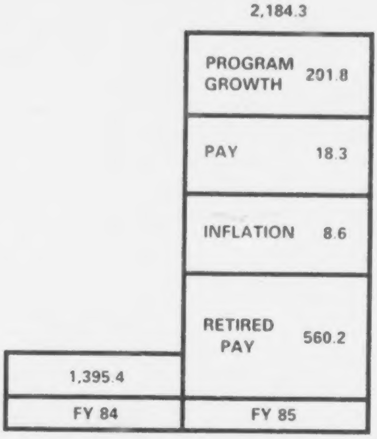


I think the point is clear enough: today's Army Reserve is no mere supplement to the Active Component; rather, it is recognized as an essential complement to the Total Army. Indeed, some Army Reserve units will deploy to the theater of operations well before many units of the Active Army. The Army's primary source of fillers, replacements, and cadre for Active and Reserve units is the Individual Ready Reserve. What all of this means is that Reserve strength and Reserve training--Reserve readiness, in short, cannot be attended to after mobilization; rather, it must be the object of our close attention and increased effort today.

RESERVE PERSONNEL, ARMY

The total Reserve Personnel, Army (RPA) budget request for FY 1985 is for $2,184,300,000, an increase of $789 million over FY 1984. Of this $789 million increase, $560.2 million is due to the addition of retired pay accrual beginning in FY 1985. The balance of the increase, $229 million, is due to program growth, pay raise, and inflation. Actual direct program growth for FY 1985 is about $202 million, about 9.2 percent of the total FY 1985 appropriation request. The FY 1985 budget request of $2.2 billion directly supports the training and administration of members of the Army's Ready Reserve as well as the Reserve Officers' Training Corps (ROTC) Program, the Health Professions Scholarship Program, the Chaplain Candidate Program, and attendance at basic officers' branch courses.

UNITED STATES ARMY RESERVE
RESERVE PERSONNEL, ARMY SNAPSHOT
($ MILLION)

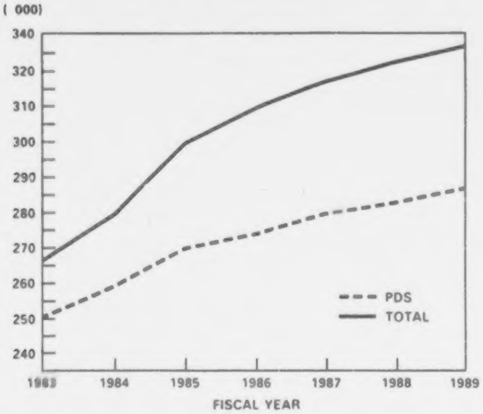


PAID DRILL STRENGTH

The number of Army reservists assigned to troop program units (paid drill strength) continues to improve. At the end of FY 1978, Army Reserve paid drill strength stood at a discouraging low of 186,000. Since that time, however, due in large measure to the foresight and support of the Congress in the form of increased Reserve end strength authorizations and a wide variety of funded strength incentives such as bonuses and educational assistance, our paid drill strength has steadily grown to our current strength (as of 29 Feb 84) of almost 251,000. By the end of FY 1984, we fully expect to achieve our authorized paid drill end strength of about 258,000. For FY 1985, we are requesting a paid drill end strength of 270,058, a substantial increase, but still nearly 11,000 personnel short of the peacetime requirement, and 36,000 short of the wartime required strength. Personnel strength has improved significantly in recent years and continues to improve. Support for further improvement is required.

UNITED STATES ARMY RESERVE

USAR STRENGTH



INDIVIDUAL READY RESERVE (IRR)

The IRR, the Army's source for wartime individual replacement and filler personnel for both Active and Reserve Component units, continues to grow in numbers. From its post-Vietnam low of about 149,000 in FY 1977, the IRR's strength posture has improved steadily. As of 31 Jan 84, the enlisted strength of the IRR stood at about 210,000. We expect a substantial improvement in these figures in future years as a result of the recent authority to extend the minimum service obligation from six to eight years.

The FY 1985 budget request provides for an expansion of the IRR reenlistment bonus program from the FY 1984 level of 4,000 to 11,466 bonuses as well as establishing a direct enlistment program which is expected to increase IRR enlisted strength by 1,200. Personnel enlisting directly in the IRR will be required to undergo two weeks' refresher training in their mobilization skills every two years for the term of their enlistments. The FY 1985 budget request will provide a 26 percent increase in mobilization skill training for nonunit reservists.

STRENGTH INCENTIVE PROGRAMS

The FY 1985 budget request provides for a total of $34.7 million for various incentive programs to increase the strength of the Army's Ready Reserve. This figure is a 33 percent increase over the level in the FY 1984 budget and represents a commitment on the Army's part to build its reserve strength closer to the wartime required level. The FY 1985 program increases Selected Reserve enlistment and reenlistment incentives by about 7 1/2 percent and increases the IRR's strength incentives by 327 percent, nearly tripling the number of IRR reenlistment bonuses and initiating a $1,000 direct enlistment bonus for non-prior service personnel. All of these bonus programs are tied to increasingly more demanding qualitative standards and to specific military skills and specialties required within the Total Army's mobilization structure. We have been most fortunate in our reserve recruiting and retention efforts in the recent past. However, faced with a steadily declining number of service-eligible eighteen-year-olds, we must do all we can to make service in the Army Reserve as attractive as possible. The incentive programs are vitally necessary if we are to continue the trend toward improvement that has characterized our strength maintenance efforts of the past several years.

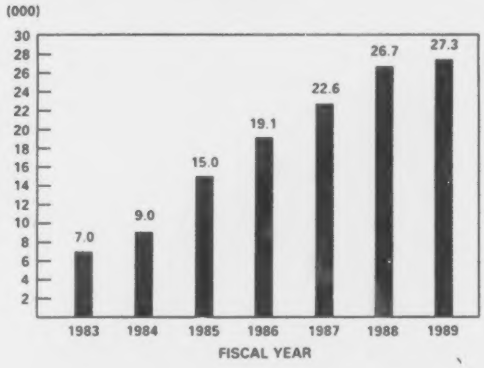
FULL TIME UNIT SUPPORT AND THE ACTIVE GUARD/RESERVE (AGR) PROGRAM

The FY 1985 budget requests contain significant increases in the Army Reserve Full Time Unit Support Program. While there will be a small decrease (11.8 percent) in Active Component personnel support to troop program units, Active Guard and Reserve (AGR) personnel will increase by nearly 94 percent, bringing the total number of full time personnel supporting units of the Army Reserve to about 20,000 (an increase of about 36.4 percent).

The AGR Program is designed to improve the mobilization readiness of the Total Army by providing personnel on duty in a full time military status to advise, administer, train, and manage the personnel and units of the Army Reserve. The program includes several categories of reserve personnel rendering full time support to various elements of the Army Reserve to enhance the Reserve's ability to perform its wartime missions.

Those assigned to troop program units serve in administrative, logistical, and training areas--all intended to assist the drilling reservists in meeting their mobilization requirements. The addition of full time personnel represents a commitment by the Army leadership.

UNITED STATES ARMY RESERVE
ACTIVE GUARD/RESERVE (AGR)
STRENGTH



The AGR end strength requested in the FY 1985 budget submission is 15,027. This represents a 67 percent increase over the authorized FY 1984 end strength of 9,022.

RECRUITER SUPPORT

The other major area of AGR growth in the FY 1985 budget request is recruiting support. The number of AGR personnel on full time recruiting duty grows from an end strength of 1,659 authorized in FY 1984 to 1,961 in FY 1985. This 302 increase in recruiter end strength (18.2 percent) is intended to build upon the reserve recruiting efforts of recent years and to ensure that the Army Reserve continues to improve its strength posture and achieve its authorized manning levels.

RESERVE OFFICERS' TRAINING CORPS (ROTC)

The FY 1985 ROTC budget request is $113,754,000. Allowing for the retired pay accrual associated with the attendance at the branch officers' basic course, this provides a 19.5 percent increase over FY 1984. During FY 1985, the number of officers commissioned through the ROTC will grow to 10,695. This is a significant step toward our FY 1989 goal of 12,112 graduates commissioned through the ROTC Program. Officers commissioned through ROTC, the largest single source of USAR officer accessions, will serve in all components of the Total Army. FY 1985 will also see a 6,523 increase in the number of Army Junior ROTC cadets in our high schools in the United States and abroad. Moreover, the number of high schools offering the Junior ROTC Program will grow from its FY 1984 level of 845 to 1,006. The Army leadership is, of course, quite pleased with the upswing of interest in and commitment to the ROTC Program that we have seen in the past few years. We are doing all we can to take full advantage of this improving climate of public response and acceptance of the military as a professional calling to build the quality of our officer accession programs to meet the needs of the Total Army.

UNITED STATES ARMY RESERVE
ROTC OFFICER PRODUCTION

FY	COMMISSIONS
82*	7,124
83*	8,245
84	9,333
85	10,695
86	11,185
87	11,586
88	12,030
89	12,112

*ACTUAL

HEALTH PROFESSIONS SCHOLARSHIP PROGRAM

The Health Professions Scholarship Program, established in September 1972 by Public Law 92-426, is designed to produce officers for the military health disciplines. Candidates accepted by an accredited institution for professional training are selected by the Office of the Surgeon General for these scholarships. Participation requires that each individual accept a commission as a second lieutenant in the Army Reserve and complete 45 days' active duty training each year. Upon graduation, the participant must serve at least one year of active duty for each year of scholarship aid, and in every case will incur a minimum active duty obligation of two years. The FY 1985 budget provides a monthly stipend of $556 to be paid to an average of 1,428 scholarship participants and full pay and allowances for 45 days of active duty for each participant. The total amount requested in FY 1985 is $13.8 million. This program is an essential element to the ultimate resolution of the serious physician shortfall faced by the Army.

OPERATION AND MAINTENANCE, ARMY RESERVE

The Operation and Maintenance, Army Reserve (OMAR) budget request for FY 1985 is for $715,450,000, an increase of $23.6 million over FY 1984. The cost of program inflation is $28.4 million, so that the net effect is a reduction of $4.8 million in the OMAR program.

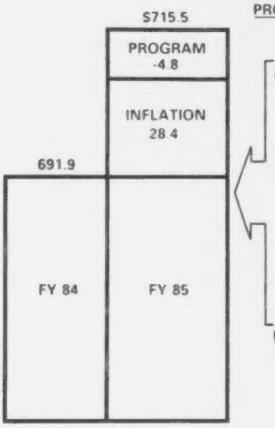
The FY 1985 OMAR budget provides necessary funding to support Army Reserve unit training ($402 million), depot level maintenance ($8.7 million), communications support ($16.5 million), base operations ($202.2 million), recruiting ($40.1 million), and other management activities ($46 million).

The OMAR program reduction of $4.8 million, particularly if continued in subsequent fiscal years, will have an adverse effect on elimination of the USAR equipment backlog. The current funding level prevents the backlog from growing. Continued emphasis and positive program growth is required to ensure the backlog is reduced to an acceptable level.

UNITED STATES ARMY RESERVE

OPERATION AND MAINTENANCE, ARMY RESERVE

FY 1985 REQUEST (IN MILLIONS)



PROGRAM CHANGES

INCREASES	31.3
1. MODERNIZATION SUSTAINMENT	(6.6)
2. COMMAND & CONTROL	(3.7)
3. MODERNIZATION	(4.7)
4. RECRUITING & ADVERTISING	(2.6)
5. DART	(2.7)
6. FORCE STRUCTURE	(2.5)
7. STORAGE OF USAR EQUIPMENT	(2.3)
8. SIDPERS	(1.4)
9. MOBEX	(1.1)
10. ADDITIONAL WORK DAY	(1.2)
11. MOBILIZATION	(1.0)
12. RETENTION	(.7)
13. FLYING HOUR PROGRAM	(.6)
14. COMMUNICATIONS	(.2)
DECREASES	36.1
1. SUPPLIES & EQUIPMENT	(15.5)
2. SHELTER FOR THE HOMELESS	(8.0)
3. CAMIS	(7.0)
4. TRAVEL	(3.7)
5. INTELLIGENCE TRAINING	(1.0)
6. DEPOT MAINTENANCE	(.3)

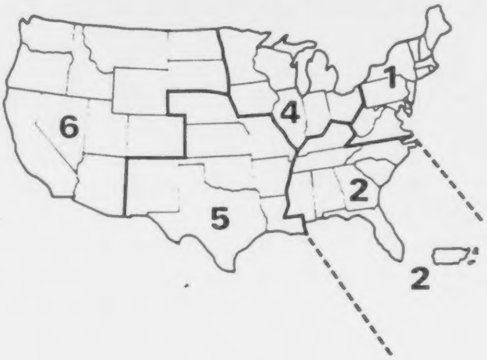
SUPPLIES AND EQUIPMENT

Supplies and equipment are an essential ingredient to mobilization readiness of reserve forces. As a result of Congressional actions over the past three years, almost all high priority, early deploying Reserve units are fully provided with their authorized supplies and equipment. We are currently filling other priority units with their essential mobilization equipment. Continued emphasis and growth is necessary if we are to fully stock all mobilizing and deploying USAR units with the cold weather clothing and equipment (CWCE), chemical defensive equipment (CDE), and go-to-war stocks required by their missions.

COMMAND AND CONTROL

The Congressionally directed reorganization of the Army Reserve command and control structure was initiated in FY 1983 and continues to unfold. In early FY 1984, Second U.S. Army HQ was established at Ft. Gillem, Georgia, and in FY 1985 Fourth U.S. Army HQ will be established at Ft. Sheridan, Illinois. The disestablishment of the nine Army readiness and mobilization regions planned for FY 1984 and FY 1985 is on schedule.

UNITED STATES ARMY RESERVE
CONTINENTAL US ARMIES
EFFECTIVE JANUARY 1985



ARMY RESERVE MANAGEMENT

As the result of recent Army decisions, the role of the Chief, Army Reserve has been enhanced through increased responsibility for the management of the Army Reserve personnel. These responsibilities are being discharged through the recently activated Army Reserve Personnel Center (ARPERCEN), a field operating agency of the Office, Chief Army Reserve. The Commander, ARPERCEN commands and controls the Individual Ready Reserve and has the responsiblity for administering the Individual Mobilization Augmentee Program and the Army Reserve portion of the Active Guard/Reserve Program. We fully expect that the activation of ARPERCEN will pay great dividends in improved responsiveness and efficiency of service to all personnel of the Army Reserve. The FY 1985 OMAR budget fully funds the activation and sustainment of ARPERCEN.

CONCLUSION

The Army Reserve as an integral and an essential part of the Total Army continues to grow in scope and importance. The Army Reserve is fully cognizant of the Nation's expectations and insistence upon the highest standards of readiness and professionalism in all we do. The men and women of the Army Reserve are ready and will continue to be ready to meet their country's call whenever it may come. Less than 72 hours after the decision was made to send Army Reserve civil affairs members to Grenada, the first teams had volunteered and were in country, on the ground. We are proud of that response.

With your continued support, we of the Army Reserve will continue to provide trained units and qualified individuals available in time of war or national emergency as part of our Total Army of excellence.

AIR NATIONAL GUARD

STATEMENT OF MAJ. GEN. JOHN B. CONAWAY, USAF, DIRECTOR, AIR NATIONAL GUARD

HIGH STATE OF READINESS

General CONAWAY. Mr. Chairman, I am General Conaway, the Director of the Air National Guard. If you would like for me to proceed.

Senator STEVENS. Go ahead.

General CONAWAY. Very briefly, sir, I want to thank you and the committee for your outstanding support of the Air National Guard this past year that has allowed us to attain our highest state of readiness in our history. We have also attained our highest strength with 102,000 personnel.

We are funded this year for 104,000, and are requesting to go to almost 108,000 next year. We do anticipate reaching our strength goal this year of 104,000, although it is becoming, as we have seen, a little tougher to do.

FUNDING OF INCENTIVE PROGRAMS

The incentive programs that you appropriated in the last few years have been extremely helpful to us, particularly in the critical skills. We certainly will need to continue them as the recruiting market becomes more difficult. A bright side to our strength is that our retention is up and holding well.

All of our units can be mobilized within 24 hours and deployed within 72 hours. The readiness and training of the Air National Guard is also at an all-time high.

UNIT DEPLOYMENT

Senator Stennis, our Meridian, Miss., RF-4 unit just returned from a major exercise in the Middle-East, and did an outstanding job representing the Air Force and the Air National Guard, and, of course, the State of Mississippi. We are very proud of the job they have done. They are also now a member of the Rapid Deployment Force. The Meridian unit is commanded by Col. John Wellons, and the people there do an outstanding job.

I will be going to Europe next month to visit four or five major Air National Guard units. A-10's from New York and A-10's from Wisconsin will be in Germany the second week of May, training with NATO allies along with A-7's from Michigan and C-130's from Texas in southern Italy.

These units will be taken over by KC-135E re-engined tankers from the Illinois and New Hampshire Air National Guard.

I will also be visiting our KC-135's on tanker task force alert at Mildenhall.

I mention this because this shows that the Air National Guard, as a full partner with the Air Force, is deployed all over the world at any given time, doing our training missions. The help of this committee has made that possible.

EQUIPMENT PROBLEMS

Equipment is a problem, as Secretary Philbin mentioned, and enhancing and modernizing our existing equipment, is important because the Air National Guard operates almost 1,700 aircraft, such as F-4C's and D's, as well as KC-135's A-7's, and C-130's. The new equipment that has been programed by the Air Force and by this committee has helped immensely in modernizing the Air National Guard, but we still have a long way to go.

MODERNIZATION PACKAGES

Our two modernization announcement packages this year have been two of the best in the history of the Air National Guard. For example, the first F-15 squadron coming to the Air National Guard is going to the Louisiana Air National Guard. Our second F-16 squadron is going to the Texas Air National Guard. Our first F-16 squadron in South Carolina is combat ready.

Two more new C-130 squadron modernizations in New York and Delaware were announced. There are five more units modernizing with the JT-3D engine on our KC-135's taking us up to 96 of our 104 tankers that will have the JT-3D engine.

I know, Senator Rudman, that you are aware that the Pease unit of the Air National Guard has received their first re-engined tanker back on the ramp. My problem now is getting them to fly the remaining A models after they have that one E model on the ramp. That is all they want to fly right now.

RE-ENGINING PROGRAM

The re-engining program is fast moving. This committee has appropriated funds for 96 of our 104 tankers to be re-engined, and we have 68 of them flying training missions and doing day-to-day Air Force missions throughout the world right now. It is a very fast moving program, and we thank this committee for their support.

ALASKA UNIT ACCOMPLISHMENTS

Senator Stevens, our Alaska unit has done a superb job. They have made a very smooth transition into the new C-130H. I visited them last year in Panama on their rotation for the SOUTHCOM deployment that Guard and Reserve are responsible for. They are doing an outstanding job. The new commander there, Lt. Col. Lindemuth, is a topnotch commander and does a super job.

Senator Rudman, I might mention Col. Bob Lilliedahl is one of our super tanker commanders. In SAC's KC-135 competition last year, the Kansas KC-135 unit finished first out of 28 KC-135 units participating. The New Hampshire unit was a very close second and a photofinish for the top two in the tanker competition.

So the support of this committee has helped us do the things that we have done, and the things that General Walker has mentioned.

ROBUSTING UNITS

In addition to these announcements that I have mentioned, we are robusting several units. We are not adding new flying units in the Air National Guard, even though the Congress and Air Force would like to do more with the Guard and Reserve. Instead, the Air Force is robusting us by going from 18 to 24 fighters at several locations, and going from 18 to 24 reconnaissance aircraft at several locations.

C–141

Just this past week there was another announcement impacting the Guard and Reserve. Speaking for the Air National Guard, it was announced that the first C–141's would come to the Air National Guard. They will be coming in fiscal year 1986. The first unit will be going to Jackson, Miss., where we have a C–130 unit that is commanded by Colonel Chapman. Also announced were some C–5's coming into the Air National Guard in a couple of years, going to the State of New York.

MODERNIZATION

These are some of the announcements and enhancements that the Air Force is doing in their continuing modernization, to support the Air National Guard in increased roles and missions.

We thank you very much for your support. The full-time support that we are asking for in the active Guard and Reserve strength, as well as technician and drill spaces, is needed because it is all programmatic. The 4,000 increase is tied directly to equipment, readiness, and missions that the Air Force has asked us to do, sir. What we are funded for will do the mission that we are asked to do.

We thank you for your support, and I stand ready for questions.

[The prepared statement of General Conaway follows:]

PREPARED STATEMENT OF MAJ. GEN. JOHN B. CONAWAY, USAF

DIRECTOR, AIR NATIONAL GUARD

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE: It is my pleasure to report to you on the current status of the Air National Guard. The Air Guard is at its highest readiness level in history and has attained a new high in manning with over 102,000 men and women deeply committed to performance of both a State and Federal mission.

The State mission of the Air National Guard is to provide organized, trained, and equipped units to respond to orders of State authorities, to protect life and property, and preserve peace, order, and public safety. During 1983, the Air National Guard was called up 51 times involving 2,263 workdays to provide assistance to civil authorities in various emergency and support operations.

The Air National Guard's Federal mission, as part of the total Air Force, is to provide units of properly equipped and trained personnel for prompt mobilization whenever called upon in time of crisis. Our units also perform designated Air Force missions during peacetime, primarily as a by-product of training.

Air National Guard flying units are organized into 24 wings, 67 groups, and 91 flying squadrons. The continued strong support of the active Air Force is permitting us to replace older, less capable aircraft with more modern and sophisticated weapon systems.

Modernization of ANG units has continued at a modest pace as evidenced in the FY 1985 Public Announcement of force changes. Our first F-16 unit is combat ready and we have announced the first F-15 conversion for the Air Guard in FY 1986. Future programs continue these modernization efforts. However, I must emphasize two considerations when you review our modernization efforts. Future conversions are programmed conversions which depend on programmed procurement rates. Modernization of the Air Force in general and the Air National Guard in particular depends heavily on your support of these procurement rates.

In FY85, the ANG will continue its modernization efforts in most major mission areas. One Tactical Air Support unit will convert from 0-2As to C-19s and assume a strategic airlift mission. This unit will also be the backup carrier for the Space Shuttle. One Tactical Fighter unit (F-4C) will expand from 18 to 24 primary aircraft authorized, and two F-4C/D training units will expand from 12 to 18 and 44 to 50 primary aircraft authorized respectively. In the Tactical Reconnaissance mission area, three RF-4C units will robust from 18 to 24 primary aircraft authorized. Finally, two Tactical Airlift units will change series from the C-130A/Ds to C-130Hs and one Air Refueling unit will change from KC-135As to KC-135Es.

By the end of FY 84, 12 of the 13 Air National Guard KC-135 units will be equipped with or in retrofit for the JT-3D engine. The JT-3D engine provides our KC-135s with increased thrust and offload capability, an increased combat capability, and a significant reduction in noise and emissions.

We have improved the capability of our units through aircraft modifications such as the addition of the A-7 Forward Looking Infrared Radar (FLIR), and several mission related improvements to the F-4, especially the continued installation of low smoke engines on RF-4s and one F-4D unit.

Equally important to the success of the Air National Guard mission are our mission support units. There are 248 independent units heavily concentrated in the areas of fixed communications, combat communications, weather, tactical control, engineering installation, civil engineering, medical and air base ground defense.

Base communications flights provide fixed communications support to our flying units. These units operate and maintain the base fixed and tactical telephone systems, base communications centers, ground-to-air radios, intrabase radios, HF radios and base cable plants.

Our combat communications units are equipped and staffed to support the Tactical Air Forces. They provide specific communications service to forward deployed commanders and provide restoral service to the Defense Communications System. They are also equipped to provide terminal air traffic control facilities and services.

The Air Guard has 39 weather flights and one weather squadron, most of which provide weather support to Army Guard and Reserve units.

Our 31 tactical control units operate control and reporting centers and posts in addition to providing forward air control posts. All units have wartime taskings and quick response deployment schedules.

We also have three aircraft control and warning squadrons which provide 24 hour per day air surveillance radar coverage for Hawaii and Puerto Rico.

We recently activated a unit to provide equipment and/or personnel augmentation to the Joint Communications Support Element. The mission of this unit is to assist during contingency military operations or disaster relief and evacuation activities.

Our engineering installation squadrons (EIS) are equipped and trained to engineer, install. relocate, remove, restore and accomplish on-site depot level maintenance on radars, antennas, cable plants, radios, and teletype and communications centers. They maintain proficiency by augmenting the Active Air Force on communications-electronics-meteorological (CEM) facility requirements worldwide.

Our civil engineering flights are equipped to undertake construction, alteration and repair projects to sharpen their skills for their wartime mission as well as completing urgently needed projects for their host bases (either active Air Force or National Guard).

We have formed two dedicated Air Base Defense Flights and one Squadron Headquarters. They are the first of these units and the Air Force program calls for us to have 69 flights and squadron headquarters. These Air Base Defense flights will protect overseas essential wartime facilities from enemy ground attack.

We have seen an increase in overall manning from 93,379 at the end of FY 1979 to 102,170 at the end of FY 1983. We are programmed to go over 104,000 this year and to almost 108,000 in FY 1985. This growth will take us from 95.7% of wartime requirements in the beginning of the 1980's to 99.2% at the end of FY 1985 even though wartime requirements have grown by 11,153 over the same period.

In FY 83, the Air Guard exceeded its combined military technician and full-time military active duty (Active Guard/Reserve) end strengths. We expect to fully meet our FY 84 end strength programs which are 1,238 higher than FY 83.

The number of military technicians will remain constant through FY 84 and FY 85. However, we have programmed 1,309 additional AGR positions in FY 85 to fill increased requirements associated with aircraft, equipment, and other support requirements of the Air Guard.

We will continue to evaluate our future manpower needs and anticipate that future budgets will contain a mix of technician/AGR growth based on cost effectiveness and increased combat readiness to more appropriately man the many mission responsibilities of the Air National Guard.

We have significantly expanded the simulated wartime training activities of both our flying and mission support units. We have increased participation in JCS exercises, in overseas deployments, and in joint training exercises with Air Force and other service units.

Finally, we have made good progress in improving sustainability by emphasizing procurement of components for mobility spares kits, chemical defense equipment and support equipment for both flying and mission support units.

As a result, I can report that the readiness of the Air National Guard is at the highest overall level in its history. However, we do continue to have problem areas.

The average age of our fleet of over 1700 aircraft is now more than 16 years. We remain critically short in some aircraft support equipment and have a long way to go to fully update our tactical communications gear. Any improvement in equipment readiness will depend directly on Congressional support for Air Force procurement requests.

With procurement levels limited by available resources, we need to continue to improve the mission capability of our current weapon systems through modifications such as the FLIR, AIM-9L and low smoke engine programs.

While our manning level has improved, we are short in many critical mission skills. The bonus/incentive program has helped to reduce our shortfall and we hope our targeted recruiting efforts will prove successful.

In reviewing the mix of active and reserve forces, I feel the Air Force has achieved a well balanced mix. The primary mission of the Air National Guard should continue to be to provide properly equipped and trained units for mobilization whenever called upon in time of crisis. We have added units which can fulfill this mission, such as the newly established Air Base Defense units, and an expansion in the number of base communications flights and civil engineering Red Horse units.

As more modern aircraft and equipment becomes available, robusting of some of our current units could provide increased capability at relatively low cost. Establishment of new combat flying units in the Air National Guard, rather than robusting, would not add more overall capability nor be more cost effective.

Transfer of active Air Force missions with high levels of peacetime activity would neither fit the basic mission of the Guard nor result in any significant economy of operation. We are better able to take advantage of available local manpower resources and lower costs of peacetime operation when we are training to provide a true mobilization force.

OPERATION AND MAINTENANCE BUDGET REQUIREMENTS

Operation and Maintenance funding provides for the day-to-day operating expenses of ANG units, including pay of civilians, aviation and ground fuel, depot maintenance of assigned aircraft, supplies, and other expenses.

The following table shows the O&M, Air National Guard funding data for FY 1983-85.

	($ In Millions)		
Budget Activity	FY 1983	FY 1984	FY 1985
Mission Forces	$1,370.8	$1,291.0	$1,392.7
Depot Maintenance	343.8	402.7	345.6
Other Support	100.6	112.9	123.8
TOTAL	$1,815.2	$1,806.6	$1,862.1

The Air National Guard Operation and Maintenance request for FY 1985 increases by $55.5 million, or 3.1 percent, above the FY 1984 level. This increase is required to support the Air Guard's readiness and training requirements as weapon systems modernization continues in FY 1985.

Mission Forces. This budget activity funds our flying and mission support operations. The $101.7 million increase in the FY 1985 budget request represents a $57.7 million increase in prices and a $44.0 million increase in program. The program growth is primarily for aviation fuel and supplies to support a growth of 10,631 flying hours as well as maintenance and supply support for the Air Guard's new strategic airlift mission at Stewart Airport, New York.

Depot Maintenance. This budget activity finances the Air Guard's reimbursement to the Air Force Logistics Command for depot maintenance on ANG aircraft and other equipment. The FY 1985 budget request is $57.1 million below the FY 1984 level. This decrease represents a $.9 million decline in prices and a reduction of $56.2 million in program. The decrease in program is due to the one-time, FY84 Congressional add-on for reengining our KC-135 aircraft with the JT-3D engine.

Other Support. This budget activity funds for our support aircraft flying operations, operating costs of the National Guard Bureau Air Directorate, Real Property Maintenance, and Base Operating Support for the eight bases at which the Air National Guard functions as host or single manager. The $10.9 million increase for FY 1985 consists of $4.0 million in price growth and $6.9 million in program growth. The program increase will support the Air Guard's new Replacement Training Unit at Kingsley, Oregon, and maintenance, aviation fuel and supplies for the additional ANG mission support aircraft.

MILITARY PERSONNEL BUDGET REQUIREMENTS

Military Personnel funding provides for the pay, allowances, clothing, subsistence, travel, and other expenses of Air National Guard members.

The following table shows the National Guard Personnel, Air Force funding data for FY 1983-85:

	($ in Millions)		
Budget Program	FY 1983	FY 1984	FY 1985
Unit and Individual Training	$ 334.8	$ 349.0	$ 513.8
Other Training and Support	199.1	255.1	375.4
TOTAL	$ 533.9	$ 604.1	$ 889.2

The Air National Guard's FY 1985 Military Personnel budget request increases $285.1 million, or 47.2 percent, above FY 1984. The majority of this increase ($243.3 million) is due to implementation of the Retired Pay Accrual provision in the FY 1984 DOD Appropriation Act. I would like to summarize the more significant elements of the program and the associated costs.

Unit and Individual Training. This budget program finances those personnel on inactive duty who annually perform 15 days of active duty training, 48 inactive duty drill periods, and additional flying training periods (Pay Group A). It also includes basic training for non-prior service enlisted personnel as well as their follow-on training at either home station or formal Air Force technical schools (Pay Group F). Lastly, it includes funding for the pay of high school graduates and seniors who are awaiting entry into basic training (Pay Group P).

The FY 1985 budget request for Unit and Individual Training increases by $164.8 million. This increase consists of $160.5 million in program growth and $4.3 million in price growth. The major program increase of $152.6 million is due to implementation of Retired Pay Accrual. Approximately $7.0 million is required for increased strength resulting from force and mission changes, increased manning to achieve wartime requirements, and additional manning of a new civil engineering flight and additions to aeromedical crews, air base ground defense flights and aerial port flights. The remaining $.9 million is for travel associated with exercise requirements and for the number of personnel in training status in FY 1984 that will carry over to FY 1985.

Other Training and Support. This budget program includes formal schooling of our Guardsmen; special training tours of active duty other than those covered in unit and individual training; pay, allowances, and other expenses for Guardsmen on full-time active duty; and other costs such as enlistment, reenlistment, and selective affiliation bonuses, survivor benefits, and the student loan repayment program.

The FY 1985 budget request for this category increases by $120.3 million above FY 1984. Program growth is $115.8 million, while price growth is $4.2 million. The majority of the program growth ($90.7 million) is due to implementation of Retired Pay Accrual. Another $14.0 million supports weapon system conversions, authorized aircraft changes, and other direct unit support increases. Increased training requirements total approximately $8.2 million. The remainder is for other less significant program changes.

SUMMARY

The Air National Guard has proven to be an integral part of the Total Force. The Air Guard exists to support U.S. foreign policy and national security objectives, while providing a State militia uniquely qualified for local disaster and public safety missions. Our responsibilities are truly global, national, and local, and each offers its own set of challenges for the future.

The Air National Guard is ready to meet these challenges. The capability of our citizen airmen to respond to the most demanding wartime missions is a matter of record. We appreciate the continuing strong support of the Congress. That support has permitted the Air National Guard to continue modernization and to make significant progress toward our goal of strength through readiness.

Mr. Chairman, this concludes my prepared statement. I will be happy to respond to any questions you may have.

AIR FORCE RESERVE

STATEMENT OF MAJ. GEN. SLOAN GILL, USAF, CHIEF OF AIR FORCE RESERVE

EFFECTIVENESS OF RESERVE FORCES

General GILL. Mr. Chairman, and members of the committee, I would like to thank you for the opportunity to appear before this committee and present the Air Force Reserve program for fiscal year 1985.

I would also like to add my thanks to the committee for their support of the Air Force Reserve in the previous years. The incentive program, and the commissary test are working very well.

It is with great pleasure that I report that the Air Force Reserve has attained its strength of 67,227 in fiscal year 1983, and we exceeded our programmed end strength of 66,000. All of our units are well-manned and they are well-trained. All Reserve units can be mobilized within 24 hours and they can be deployed within 72 hours.

The keys to Reserve effectiveness have been and they continue to be modern equipment, meaningful missions, our technician and Reserve personnel, and the strong support of the active force. Overall, I believe the Air Force Reserve is stronger than it has ever been in its history.

EQUIPPED FLYING UNITS

As of January 1984, all of our equipped flying units are combat ready, with the exception of three units converting to newer aircraft. All six of our associate strategic airlift wings are combat ready, as were our two SAC associate KC-10 units. Additionally, each of the KC-135 tanker squadrons remains in combat ready status and has crews standing a daily alert.

AIRCRAFT MODERNIZATION PROGRAMS

The Air Force Reserve will continue to pursue modernization of its airlift and fighter forces in fiscal year 1985. This year, we will establish our first equipped strategic airlift unit by converting our C-130B wing at Kelly Air Force Base, Texas, to C-5A's. Placing C-5's in the Air Force Reserve will reduce their peacetime flying cost and extend their service life as we will fly them less than the active force would.

We will provide 100 percent of the air crews and maintenance personnel for these aircraft, while continuing to supply 50 percent of the air crews and 45 percent of the maintenance personnel for the C-141's and C-5's in the associate fleet.

We are extremely pleased with the addition of the F–16 to replace our aging F–105's at Hill Air Force Base, Utah, and the conversion of all of our F–4 units from C models to the more capable D model. Although some inroads have been made in fighter modernization, our continued modernization depends on sustained procurement rates of new aircraft. Delayed modernization will dictate that our F–4D aircraft will remain in the inventory much longer than we desire.

In this light, we are pursuing several desired modifications that are urgently needed to make these aircraft viable against the threat of the late 1980's. The addition of the C–5's and the F–16's to the Air Force Reserve's inventory, and our final phase out of C–7's and F–4C's and F–105's by the end of this fiscal year are important milestones in ensuring that the Reserve forces have first line equipment.

AIRLIFT PROGRAMS

However, on the airlift side, our program still doesn't fully address the replacement for the older C–130A aircraft. This problem is the same as it was last year, except that our C–130's are 1 year older. We have some now that are 31 years old, with an average age of 27 years, and they are still not scheduled for replacement until the 1990's.

The current plan calls for the C–17 to replace active force C–14's and C–130's, which in turn will be used to replace the older C–130A's in the Reserve and the Air National Guard. This is a workable plan, but it is contingent upon the Air Force procuring the C–17 in a timely manner.

I would strongly urge that the Congress fully support the C–17 program so that our existing airlift shortfalls may be eliminated and replacements will become available for our older A model C–130's just as soon as possible.

TRAINING PROGRAMS

As reservists train, they support requirements that would otherwise have to be fulfilled by active force resources. We do many jobs as a by-product of our training. Let me give you just a few examples, sir.

In fiscal year 1983, Reserve crews of equipped units airlifted 5,213 tons of Air Force cargo, flew 79,458 passengers, and we air dropped nearly 29,000 airborne troops as part of the normal training mission. Additionally, the Air Force Reserve associate C–141 and C–5 units flew more than 67,000 hours, and our associate AERO-MEDEVAC units flew 1,798 missions and airlifted over 54,291 patients.

We also share rotational duty in Panama with the Air National Guard in support of the U.S. Southern Command. We provided six C–130 aircraft and seven crews 6 months each year.

The Reserve crews and support units routinely participate in JCS and MAJCOM field training exercises and deployments. During fiscal year 1983, our units demonstrated their highest state of readiness while participating in three major command sponsored operational competitions.

Reserve C–141 associate units won the top three maintenence awards in MAC's Volant Rodeo. In the SAC bombing and navigation competition our KC–10 associate units placed first and second in the best KC–10 crews. Our KC–135 wing won the naviation trophy. In the TAC gunsmoke competition, one of our A–10 fighter units placed second in the maintenance team competition, and another placed second in the weapons loading competition.

I am also proud to mention that the Reserve C–141's and KC–10 associate crews were among the first to fly missions in support of the U.S. military operation in Grenada. The first C–141 that came out of Grenada with our medical students on board was a Reserve C–141 crew out of Charleston Air Force Base. Also, one of the first C–141's out of Beirut, Lebanon, with some of our wounded Marines on board was an AERO-MEDIVAC Reserve crew. The performance of these missions exemplifies the total force team in action.

SPECIAL OPERATIONS AND RESCUE RESERVISTS

Our special operations and rescue reservists continue to provide outstanding rescue support for launch and recovery of the space shuttle mission at Cape Canaveral, Fla. For the eighth consecutive year, our weather reconnaissance group flying out of Keesler Air Force Base, in Senator Stennis' State of Mississippi, accomplished more than 70 percent of all the hurricane missions in the Gulf of Mexico, the Atlantic, and the Caribbean. Last year, we tracked eight major hurricanes and storms. Additionally, the unit assisted the Guam based active weather unit in tracking three separate storms in the Hawaiian Island area.

COMBAT AND MISSION SUPPORT

In the area of combat support and mission support activities, there are nearly 400 Air Force Reserve support units. I would like to say, through this 5-year defense plan, we have nearly 21,000 additional reservists who will be added to our rolls, and 85 percent of those are in the support area. The great majority of them are in the medical area, and we will increase 238 percent in the medical area over the 5 years.

To expand communication security capabilities, both in peacetime and wartime, two Air Force Reserve electronic security squadrons have been formed. One is at Brooks Air Force Base, Texas and one is at Offutt Air Force Base, Neb., and those units are providing surveillance support and communications monitoring, analysis, reporting, and survey. We also formed a basic military training squadron in San Antonio, Tex., in 1983, and it is functioning very well.

OVERALL MANNING

Concerning the overall manning, I mentioned earlier the very favorable manning posture the Air Force Reserve has achieved and maintains. We started fiscal year 1983 with 64,443 people, and we ended the year with an onboard strength of 67,227, a net increase of 2,784 people. We increased the quality of our force as evidenced by the fact that 97 percent of all of our nonprior service enlistments were high school graduates or equivalents, this was a 7 percent increase over fiscal year 1980.

Our unit commanders and supervisors at all levels have taken an active recruiting role. With their enthusiasm and hard work combined with the excellent performance of our recruiting force, and a continued command emphasis on retention, we fully expect to meet our fiscal year 1984 programmed end strength of 69,880. Our retention is running better than it has ever been.

OPERATIONS AND MAINTENANCE FUNCTION

I would like to say also that the operation and maintenance function of the Air Force Reserve and the O&M appropriation provides for that day-to-day operating expense of the Reserve bases and units, including the pay of civilian personnel, aviation and ground fuel, depot maintenance, real property maintenance, supplies, and other expenses required to carry out our mission. We think that it is the minimum amount that is in the budget for us to carry out our mission.

The requested growth continues to recognize the ever changing need of the defense environment, and provides the Air Force with a better equipped, more operationally oriented Air Force Reserve that can be mobilized immediately.

In summary, while the war fighting and the readiness role of the Air Force Reserve continues to be an important element within the total force, we will continue to modernize our equipment, refine and improve our mobilization procedures, and recruit and retain the people needed to assure that we are able to fly and fight at any time.

That concludes my statement. I would appreciate the opportunity to answer your questions.

[The prepared statement of General Gill follows:]

PREPARED STATEMENT OF MAJ. GEN. SLOAN R. GILL, USAF
CHIEF OF AIR FORCE RESERVE

Mr. Chairman and Members of the Committee:

Thank you for the opportunity to appear before this committee to present the Air Force Reserve program for FY 1985.

It is with great pleasure that I report that the Air Force Reserve attained an end strength of 67,227 in FY 1983, exceeding our programmed end strength of 66,600. All of our units are well-manned and well-trained. All Reserve units can be mobilized in 24 hours and deployed within 72 hours. The keys to Reserve effectiveness have been, and continue to be, modern equipment, meaningful missions, our Technician and Reserve personnel and the strong support of the active force. Overall, I believe the Air Force Reserve is stronger than it has ever been.

As of January 1984, all of our equipped flying units were combat ready with the exception of 3 units converting to newer aircraft. These units are:

C-130E unit converting from C-7As (Maxwell AFB, Alabama)
F-4D unit converting from F-4Cs (Homestead AFB, Florida)
F-16 unit converting from F-105s (Hill AFB, Utah)

All six of our associate strategic airlift wings were combat ready, as were our two SAC Associate KC-10 units. Additionally, each of the three KC-135 tanker squadrons remains in combat ready status and has crews standing daily alert.

The Air Force Reserve will continue to pursue modernization of its airlift and fighter forces in FY 1985. This year we will establish our first equipped strategic airlift unit by converting our C-130B wing at Kelly AFB, Texas to C-5As. Placing C-5s in the Air Force Reserve will reduce their peacetime flying cost and extend their service life as we will fly them less than the active force would. We will provide 100% of the aircrews and maintenance personnel for these aircraft while continuing to supply 50% of the aircrews and 40% of the maintenance personnel for the C-141s and C-5s in the associate fleet. We are extremely pleased with the addition of the F-16 to replace the F-105s at Hill AFB, Utah and conversion of all of our F-4 units to the more capable D model. Though some inroads have been made in fighter modernization, our continued modernization depends on sustained procurement rates of new aircraft. Delayed modernization will dictate that our F-4D aircraft remain in the inventory much longer than desired. In this light, we are pursuing several desired modifications that are urgently needed to make these aircraft viable against the threat of the late 80s. The addition of the C-5 and F-16 to the Air Force Reserve's inventory and the phaseout of C-7s, F-4Cs and F-105s by the end of this fiscal year are important milestones in ensuring the reserve forces have first-line equipment.

However, on the airlift side, our program still does not fully address a replacement for the C-130A aircraft. This problem is the same as it was last year except that now our C-130As are one year older. By the end of this fiscal year, the C-130A fleet will average 27 years of age and is still not scheduled for replacement until the 1990s. The current plan calls for the C-17 to replace active force C-141s and C-130s which in turn will be used to replace the older C-130As in the Reserve and Guard. This is a workable plan but is contingent upon the Air Force procuring the C-17 in a timely manner. I would urge the Congress to fully support the C-17 program so that our existing airlift shortfalls may be eliminated and replacements will become available for our A model C-130s as soon as possible.

As Reservists train, they support requirements that would otherwise have to be fulfilled by active force resources. For example, in FY 1983, Reserve crews of equipped units airlifted 5,213 tons of cargo, flew 79,458 passengers and air dropped nearly 29,000 troops as part of their normal training missions. Additionally, Air Force Reserve associate C-141 and C-5 units flew more than 67,000 hours, and our associate aeromedical evacuation units flew 1,798 missions, airlifting 54,291 patients. We also share rotational duty in Panama with the Air National Guard in support of United States Southern Command by providing six C-130 aircraft and seven crews six months each year.

Reserve crews and support units routinely participate in JCS and MAJCOM field training exercises and deployments. During FY 1983, our units demonstrated their high state of readiness while participating in three major command sponsored operational competitions. Reserve C-141 associate units won the top three maintenance team awards in MAC's Volant Rodeo. In the SAC Bombing and Navigation competition, our KC-10 associate units placed first and second in the best aircrew competition, our KC-135 wing won the navigation trophy. In the TAC Gunsmoke competition, one of our A-10 fighter units placed second in the maintenance team competition and another placed second in the weapons loading competition. I am also proud to mention that Reserve C-141 and KC-10 Associate crews were among the first to fly missions in support of U.S. military operations in Grenada while our C-130s took over CONUS missions to free active force C-130s for Grenada duty. The performance of these missions exemplifies the Total Force team in action.

Our Special Operations and Rescue Reservists continue to provide outstanding rescue support for launch and recovery of the Space Shuttle mission at Cape Canaveral, Florida. For the eighth consecutive year, our weather reconnaissance group flying out of Keesler AFB, Mississippi, accomplished more than 70 percent of all hurricane missions in the Gulf of Mexico, the Atlantic and the Caribbean; last year we tracked 8 hurricanes/storms. Additionally, the unit assisted the Guam based active weather unit in tracking three separate storms in the Hawaiian Islands area.

In FY 1983, Air Force Reserve rescue and recovery units flew 82 search and rescue missions and 14 Military Assistance for Safety and Traffic (MAST) missions and were officially credited with saving 40 lives. During this period the Civil Air Patrol (CAP) flew 1,547 search and rescue missions accounting for 115 lives saved. The Air Force Reserve continued to provide valuable assistance and advice for CAP activities such as cadet encampments, aerospace education workshops, and a wide variety of other special activities, such as disaster exercises.

In the area of combat support and mission support activities, there are nearly 400 Air Force Reserve support units. Many of these units, as part of their training activities, provide considerable peacetime accomplishments which assist in keeping the peacetime expenditure of the Total Force to a minimum. The Air Force Reserve provides 100 percent of the Air Force's Medical Service Squadrons, 64 percent of the aeromedical evacuation units and 22 percent of the Air Force's Tactical Hospitals and Clinics. Currently, Reservists contribute almost 60 percent of the aircraft battle damage repair capability with personnel in six Air Force Logistics Command gained Combat Logistics Support Squadrons. Also, the Air Force Reserve provides approximately 20 percent of the Air Force civil engineering force and equipment and 47 percent of the Aerial Port Squadrons. The majority of our programmed support build from FY 1984 to FY 1985 is in the Civil Engineering force and Medical Service Squadrons.

To expand communications security capabilities both in peacetime and wartime, two Air Force Reserve Electronic Security Squadrons have been formed. One squadron is located at Brooks AFB, Texas, and the other at Offutt AFB, Nebraska. These units provide surveillance support in communications monitoring, analysis, reporting and survey.

A Reserve Basic Military Training Squadron was established in FY 1983. This unit at Lackland AFB, Texas provides military training instructors to support the basic training surge during mobilization. The Tactical Fighter Training School (TFTS) was formed last year and performs pilot upgrade training in A-10 aircraft at Barksdale AFB, Louisiana for the Air Force Reserve, Air National Guard, and active force personnel.

In addition to our unit program, the Air Force has a successful program to provide trained Individual Mobilization Augmentees (IMAs) to active force units upon mobilization. IMA requirements are identified by grade and skill as part of the annual wartime manpower planning process of the Air Force. IMAs are members of the Selected Reserve and are assigned to specific positions established in active force organizations and are trained and supervised by the active force.

Concerning overall manning, I mentioned earlier the very favorable manning posture the Air Force Reserve has achieved and maintained. We started FY 1983 with 64,443 people and ended the year with an on-board strength of 67,227, a net increase of 2,784 people. We increased the quality of our force as evidenced by the fact that 97 percent of all non-prior service enlistments were high school graduates or equivalent. This was a 7 percent increase over FY 1980. Our unit commanders and supervisors at all levels have taken an active recruiting role. With their enthusiasm and hard work, combined with the excellent performance of our recruiting force, and a continued command emphasis on retention, we fully expect to meet our FY 84 programmed end strength of 69,880.

As in the past years, the recruitment and retention of qualified personnel in critical skill areas continues to be difficult. It is in these areas that we will continue to concentrate our incentive program to better recognize the economic realities of recruiting and retaining highly skilled personnel. The programs authorized by Congress for this purpose will allow the USAFR to improve operational efficiency and have a meaningful effect on recruiting and retention. With these resources, we will be able to attract prior service people who have already received extensive training and experience in the critical skills we require.

We finance our force structure and programs primarily in two appropriations. These are the Reserve Personnel, Air Force appropriation and the Operation and Maintenance, Air Force Reserve appropriation. The Reserve Personnel appropriation provides for the pay and allowances of reservists during their active and inactive duty training periods, while performing special tours of active duty, and while undergoing school training. This appropriation also includes funding for Reserve personnel called to full-time active duty for training, administration and recruiting of the Air Force Reserve program. In addition, funds finance the military personnel costs of students enrolled in both the Senior and Junior Reserve Officer's Training Corps (ROTC) programs and students participating in the Armed Forces Health Professions Scholarship Program (HPSP). The FY 1985 request for this appropriation is $565.8 million which is an increase of $177.0 million over the FY 1984 current estimate. This growth reflects the large requested increase in strength levels, +4,949 end strength and +4,300 average strength, and the $142.1 million increase for retirement accrual. Our first equipped C-5 unit, the full year impact of FY 1984 aircraft conversions, and new aircraft in FY 1985 account for a large part of the requested increase in personnel. Also, additional requirements in mission support capability to meet wartime taskings are reflected by increases of

311 aerial port aircraft loading and transportation personnel, 908 medical service and aeromedical evacuation personnel, and 726 civil engineering specialists to provide for field messing and battle damage repair of facilities and runways.

The Operation and Maintenance, Air Force Reserve appropriation provides for the day-to-day operating expenses of Reserve bases and units including the pay of civilian personnel, aviation and ground fuels, depot maintenance, real property maintenance, supplies and other expenses required to carry out the Reserve mission. This appropriation increases in FY 1985 by $92.8 million of which $26.9 million is price growth. Requested program increases of $65.9 million are the result of a full year's operation of aircraft conversions that occurred in FY 1984 plus additional mission changes to enhance readiness and wartime capability. The increases in FY 85 occur in C-141 Strategic Airlift ($+11.3 million), KC-10 Tanker Cargo ($+6.8 million), F-16 Tactical Fighters ($+6.6 million), A-10 Tactical Fighters ($+4.1 million), C-130 Tactical Airlift ($+2.4 million), F-4 Tactical Fighters ($+1.1 million) and Civil Engineer, Aerial Port, Aeromedical Evacuation and Medical Service Units ($+2.3 million). Depot Maintenance program growth ($+23.0 million) is related to the addition of more modern, sophisticated aircraft to the Air Force Reserve inventory and increased structural repairs on the aging C-130 fleet. Increased Base Operating Support and Real Property Maintenance requirements support the more modern aircraft inventory and the continued strength build in the Air Force Reserve ($+6.3 million). These increases have been partially offset by decreases in units (e.g. F-105s) which were affected by conversions in previous years ($-5.5 million).

The requested growth continues to recognize the ever changing needs of the defense environment and provides the Air Force with a better equipped, more operationally oriented Air Force Reserve that can be mobilized immediately.

In summary, while the war-fighting and readiness role of the Air Force Reserve continues to be an important element within the Total Force, we will continue to modernize our equipment, refine and improve our mobilization procedures, and recruit and retain the people needed to assure we are able and ready to fight at any time.

This concludes my statement, Mr. Chairman. I will be glad to respond to questions.

BIOGRAPHICAL SKETCH OF WITNESS

Major General Sloan R. Gill is Chief of the Air Force Reserve, Headquarters U.S. Air Force, Washington, D.C., and Commander, Headquarters Air Force Reserve, a separate operating agency located at Robins Air Force Base, Georgia. As Chief of the Air Force Reserve, General Gill serves as the principal adviser on Reserve matters to the Air Force Chief of Staff. As Commander of the Air Force Reserve, he has full responsibility for the supervision of all U.S. Air Force Reserve units around the world.

General Gill was born December 3, 1929 in Molena, Georgia. He graduated from Staunton Military Academy in 1948 and received a bachelor of science degree in industrial management from Georgia Institute of Technology in 1952.

General Gill was commissioned a second lieutenant in March 1952 through the Air Force Reserve Officers' Training Corps program. He was called to active duty in July of that year. He received primary flying training at

Bainbridge, Georgia, and graduated in September 1953 from advanced flying school at Enid, Oklahoma, where he flew B-25 Mitchell bombers.

His first active-duty assignment following graduation was at Westover Air Force Base, Massachusetts, flying Douglas C-118 Liftmasters with the 30th Air Transport Squadron, Military Air Transport Service. In April 1955 the squadron transferred to McGuire Air Force Base, New Jersey. During this assignment General Gill participated in Operation "Wounded Warrior", the air evacuation of French Foreign Legion troops from the beleaguered fortress at Dien Bien Phu, North Vietnam, to French bases in North Africa. In December 1955 he was the first pilot of a C-118 that established a world record for propeller-driven transports from McGuire Air Force Base to Rhein-Main Air Base, Germany - 10 hours, 22 minutes.

General Gill was released from active duty in September 1956, and subsequently joined the 700th Troop Carrier Squadron, Air Force Reserve, at Dobbins Air Force Base, Georgia, where he qualified as an instructor pilot and flight examiner in Fairchild C-123 Providers. He became a flight commander in the 700th Troop Carrier Squadron in May 1960. In November 1961 he entered the U.S. Civil Service as base operations officer at Dobbins Air Force Base, remaining with the 700th Troop Carrier Squadron as a reservist. He was called to active duty during the Cuban missile crisis in October 1962 and flew troops and supplies to southern Florida.

In November 1963 General Gill joined the Air Reserve Technician program, remaining with the 700th Troop Carrier Squadron. Two years later his unit changed to Douglas C-124 Globemasters and was assigned to the Military Airlift Command. The Squadron was activated in January 1968 during the Pueblo crisis and flew worldwide missions in support of the Military Airlift Command. General Gill was released from active duty in June 1969 and resumed his Air Reserve Technician duties at Dobbins Air Force Base as operations officer.

He became director of operations for the 445th Military Airlift Wing at Dobbins Air Force Base in July 1970. When the wing was deactivated in June 1971, General Gill was assigned as deputy commander, 918th Military Airlift Group, and deputy commander of Dobbins Air Force Base. In October 1971 he became commander of the 908th Tactical Airlift Group, Maxwell Air Force Base, Alabama. His unit flew C-7A Caribous and was the first Reserve C-7A unit to become fully combat ready.

In June 1973 General Gill assumed command of the 928th Tactical Airlift Group at Chicago O'Hare International Airport. He was also base commander of the Chicago O'Hare Reserve Air Facility. In July 1974 General Gill transferred to Selfridge Air National Guard Base, Michigan, and served as vice commander and senior Air Reserve Technician for the 403rd Tactical Airlift Wing.

He moved to Air Force Reserve headquarters at Robins Air Force Base in September 1975 and was assigned to an active duty tour as director of operations. In July 1976 he became commander of the 94th Tactical Airlift Wing, Dobbins Air Force Base. Under his command the 94th Tactical Airlift Wing received the Air Force Outstanding Unit Award.

He took command of the 433rd Tactical Airlift Wing, Kelly Air Force Base, Texas, in June 1978 and, from May 1979 to March 1981, he served as deputy to the Chief of Air Force Reserve at Air Force headquarters. In April 1981 General Gill was named commander of 4th Air Force, McClellan Air Force Base, California. He assumed his present command in November 1982.

The general is a command pilot with more than 10,000 hours military flying time. His military decorations and awards include the Legion of Merit with two oak leaf clusters, Meritorious Service Medal, Air Force Outstanding

Unit Award ribbon with one oak leaf cluster, Combat Readiness Medal, National Defense Service Medal with service star, Vietnam Service Medal with service star, Air Force Longevity Service Award Ribbon with four oak leaf clusters, Marksmanship Ribbon, Republic of Vietnam Gallantry Cross with palm, and the Republic of Vietnam Campaign Medal.

General Gill was promoted to major general February 10, 1982, with date of rank August 1, 1978.

He is married to the former Dolores Pitman of Hattiesburg, Mississippi. They have three children: Roxann, Jack and Andy.

NAVAL RESERVE

STATEMENT OF REAR ADM. C. J. KEMPF, USN, DIRECTOR OF NAVAL RESERVE

GROWTH IN STRENGTH OF NAVAL RESERVE

Admiral **KEMPF**. Mr. Chairman, I am pleased to report to you that we have a strong Naval Reserve, and it is growing stronger. I think the most important thing to note is that our Naval Reserve is an integral part of our naval structure and is essential to our mission accomplishment.

The capability of the Naval Reserve continues to improve, and the most encouraging aspect is the growing Selected Reserve. We ended fiscal year 1983 with 96,000 in Category A, that is drilling reservists, and today we stand at just above 100,000 Selected Reservists, including those in the training pipeline.

RECRUITMENT ACTIVITIES

We have added 250 recruiters above what we had planned this year. We have just started bringing them on line as of 1 April. We have added additional resources to continue this growth. Although our 1984 end strength objective was raised by 5,000 over what we had planned, we are very optimistic that we will end fiscal year 1984 with 105,000 category A drillers, which is an increase of 9,000 over fiscal year 1983.

READINESS

We have shown a modest improvement in readiness since last year in the Naval Reserve. The mutual support that we provide to the fleet, at the same time that we are providing the Selected Reserve with training, is increasing and has now become a way of life. It is enjoyed by both the fleet and the reservists who are participating in current fleet operations.

The example of our reservists' response to the call to help out the New Jersey crew was indicative of the spirit that is in the Naval Reserve today. We had 850 volunteers within 96 hours, and we had six increments of personnel that participated in that evolution. Approximately 350 Naval Reservists went to the New Jersey.

MODERNIZATION GROWTH

The Naval Reserve will continue its growth and modernization in fiscal year 1985. The President's budget contains over $2 billion in support of the Naval Reserve. The Reserve Personnel, Navy request is $1.132 billion. Although $283 million of the increase over fiscal year 1984 is for the retirement accrual acount, there is $65 million growth in that appropriation. This growth is to support additional Selected Reservists and full-time support personnel, and to provide more training.

We plan, at the end of fiscal year 1985, in the budget that you have before you, to end that year with 110,000 Selected Reservists, that is personnel in Category A. We need to continue the 10,000 SAM, the Sea and Air Mariner program, the nonprior service enlistment program, which was new this year. We need to continue that level of effort to sustain this kind of growth.

The reason we need the SAM program is that 50 percent of our Selected Reserve requirements are in pay grade E-4 and below. We, today, have some 17,000 vacancies in those billets. So we need to bring in the younger personnel to fill these key slots. In some cases, because of the skill training that is required, we need to recruit new people that we can send to A and follow-on C schools to develop those skills.

OPERATIONS & MAINTENANCE

In the Operation and Maintenance, Navy Reserve Appropriation, the request is for $830 million. That is an increase of $193 million over fiscal year 1984, but a large portion of that, some $70 million, is the result of new accounting procedures for aviation depot level repairables. There is also $55 million in cost escalation.

There is still $68 million in program growth which includes additional flight-hours. We have gone from funding 82.5 percent of primary mission readiness for our aviators to 85 percent in this budget. Our expanded Sea and Air Mariner program accounts for another $12 million, and we have more modernization and overhauls to the tune of $27 million.

Our modernization of equipment continues. Our NRF frigate plan is on schedule. We are continuing to do horizontal integration in the aviation area.

In summary, I would like to say that the Naval Reserve capability is increasing. Readiness is improving. Our personnel strength is up. Training is more effective. Our forces are being modernized. The fiscal year 1985 request that you have will accelerate progress in all of these areas.

Our recent report to Congress on the Navy's total force describes what we have done, what we are doing, and what we plan to do in future budgets to sustain this growth. We are improving the Naval Reserve today to meet the challenges of tomorrow.

I will be pleased to answer any questions that you might have.

[The prepared statement of Admiral Kempf follows:]

PREPARED STATEMENT OF REAR ADMIRAL CECIL J. KEMPF

DIRECTOR OF NAVAL RESERVE

Mr. Chairman and Members of the Committee:

It is my pleasure to appear before you today to outline the current status of the Naval Reserve and present our program for Fiscal Year 1985.

This is my first opportunity to appear before this committee since assuming the responsibilities of Chief of Naval Reserve last December. Although I have had numerous associations with the Naval Reserve during my more than 33 years of commissioned service, including my first assignment in a Reserve squadron during the Korean War, I now have a better appreciation of the capabilities and enthusiasm of our citizen sailors.

THE NAVAL RESERVE MISSION

The Naval Reserve is an integral part of the Navy's structure and is essential to the successful execution of the Navy's mission. As Admiral Watkins has stated, our national military strategy rests on three fundamental pillars: deterrence, forward defense, and allied solidarity.

The Naval Reserve's role is to contribute to the overall Navy capability in the first two of these pillars. Obviously, a strong Naval Reserve is an effective part of the Navy's deterrence capability. The contribution of the Naval Reserve to the Navy's forward defense capability is more subtle, but is of growing importance. A Naval Reserve which is integrated fully into the Navy's structure provides support to the Navy's active forces, permitting, as a by-product of training, more efficient use of deployed Naval forces.

The Navy's goal is a 600 ship, 15 battle group force to achieve the capability necessary for the success of its maritime strategy. We must continue to improve the readiness and sustainability of the Naval Reserve so that it can be a more effective part of this strategy. The Naval Reserve mission is stated simply: to be trained and ready for mobilization, ready to be a part of the Navy that wins the war at sea.

TODAY'S NAVAL RESERVE

I am pleased to report that the capability of the Naval Reserve continues to improve. Our readiness indicators are up. Selected Reserve strength continues to grow. The match of individual skills with mobilization billet requirements has increased. The program for modernization of equipment has been accelerated. Training opportunities are being made more interesting and productive. These gains have resulted in a parallel improvement in the support we provide to active Navy units as a by-product of mobilization training - what we call Mutual Support.

Selected Reserve Strength

One of the most encouraging signs of improvement in the Naval Reserve is our gains in Selected Reserve (Category A) strength. Our authorized Selected Reserve average strength for Fiscal Year 1983 was near 92,500 and is just over 96,000 for Fiscal Year 1984. The Naval Reserve exceeded the Fiscal Year 1983 strength floor by reaching 95,955 at the year's end. Our growth has continued to increase to over 97,100 at the end of January 1984.

We have, however, seen a leveling off trend. The nation's improving economic climate, plus the tasking of additional recruiting for our new Sea and Air Mariners and accelerated TAR growth, has adversely affected the results of a relatively small recruiting force. We are working to obtain additional recruiters and associated support funds this year to maximize our efforts to recruit and retain the highest quality personnel in the Naval Reserve.

I am optimistic that, although we have raised our Fiscal Year 1984 end strength objective by more than 5,000 over what it was last year at this time, we will meet our target of 108,000 Selected Reservists in Category A and other Reservists on Initial Active Duty Training.

Improved Match of Selected Reservists

The positive management actions we instituted to improve the match of skills of individual Selected Reservists and their mobilization billet requirements are working. In Fiscal Year 1982 we implemented the Naval Reserve Recruiting and Manning Objectives System (NAVRES RAMOS), which is designed to match accessions with Selected Reserve mobilization requirements, thereby improving the quality of manning in the Selected Reserve. This system controls accessions in significantly overmanned ratings and provides the highest incentives for recruiters to fill ratings which are most severely undermanned.

We are also encouraging the cross training and subsequent transfer of personnel, who are in skill areas which are full relative to requirements, to areas of relative shortage. The overall trend of the Selected Reserve in matching skills to mobilization requirements is moving toward our goal of a one hundred percent match of skills and billets.

Improved Training

Providing quality mobilization training to members of the Naval Reserve is a constant challenge. It is particularly difficult during times of personnel strength increases, evolving force structure, and upgrading of equipment. However, we are making real progress. Spearheading the drive to improved training is the Naval Reserve Force (NRF) Frigate Program. Innovative approaches for qualification training are being developed, including:

- o Intensive Naval Reserve Force Pre-arrival Crew training which commences two years prior to transfer of the ship to the Naval Reserve Force.
- o The development of FFG-7 (NRF) and FF-1052 (NRF) Navy training plans which include all SELRES training requirements.
- o Formal onboard training packages to improve the performance of individuals and teams.
- o The inclusion of Naval Reserve requirements in existing Navy training plans.
- o Improved utilization of Fleet Training Centers on weekends.
- o An ambitious Shipboard Simulator and Damage Control Training Program.

We are continuing to emphasize training with the active Navy gaining command to which the unit or individual will mobilize. This concept of training has proven to be most effective. It provides realistic hands-on training opportunities for Reservists which improve individual readiness and is a positive motivator for participation and retention. It also provides opportunities to support active force units as a by-product of such training (Mutual Support) and makes active force personnel more aware of the capabilities and dedication of Naval Reservists. We are requesting additional funds for the Weekend Away Training (WET) program that makes much of this productive training possible.

Readiness Improvements

The overall Naval Reserve Force Readiness has shown modest improvement since last year, which I attribute to quality improvements in personnel training and hardware.

The readiness of our aviation units continues to show a consistent pattern of improvement. The benefits of the concerted effort to modernize the force are being realized in terms of greater operational capability and better trained personnel. We have enjoyed an approximately ten percent increase in readiness from the positive trend reported to you at this time last year. A-7B TF-30 P408 engines, isolated personnel shortages, and the temporary decrease in reported readiness associated with transition are three areas which still need improvement. I am confident, however, that existing and proposed programs will enable us to continue our progress in aircraft squadron readiness.

The readiness status of ships assigned to the NRF continues to remain relatively stable. While we did have some degradation in readiness because of personnel shortages, we have taken steps to improve manning aboard our ships. We have directed field activities to place first priority on recruiting to ship vacancies. Additionally, we have provided for additional drills (up to 30) for Selected Reservists assigned to NRF ships, initiated a pilot program for remote manning in Charleston, and developed a proposal for an incentive pay for personnel assigned to such difficult-to-man units.

Readiness of our other commissioned Naval Reserve surface units has continued to improve. For the period ending this past January, we have seen a steady six percentage point growth over the past year and a half in units fully capable of meeting assigned missions. Further, Navy's Fiscal Year 1985 budget contains increased funds for equipping these units.

In our reinforcing/sustaining units we are showing even better progress. Over the past year and a half we have shown a seventeen percentage point improvement in readiness of units essentially capable of meeting assigned missions. Concurrent with this has been a twenty-two percentage point increase in personnel qualified for their mobilization billets at a time when we have expanded from approximately 65,000 to over 81,000 billets in reinforcing/sustaining units.

Mutual Support

Mutual Support is the method of providing direct assistance to the Navy in the performance of its peacetime mission as an increasingly important by-product of mobilization training. We are continuing to emphasize this concept because of its high efficiency. It benefits the Navy in the form of real work performed and the Reservist in the form of realistic training and the satisfaction of participating in day-to-day Naval functions. Examples of our efforts in this area during Fiscal Year 1983 and continuing through the present, are:

- Reserve patrol squadrons (P-3's) routinely provide fleet ASW support at Bermuda, Lajes, and Cubi Point during active duty training periods. In addition, Naval Reserve patrol squadrons dedicated 800 flight hours in Fiscal Year 1983 to the Vice President's Drug Interdiction Program, resulting in the eventual apprehension of several drug runners. One example was the seizure of the M/V Northern Light and confiscation of $44 million worth of marijuana.

- Reserve tactical attack and fighter squadrons provide friendly and opposition forces for war-at-sea, fleet air defense, and air-to-air warfare exercises for workup training of deploying battle groups. For example, in April 1983, we deployed eighteen F-4 aircraft from two Dallas based Reserve fighter squadrons to NAS Sigonella for Exercise National Week XXXII. These units provided extensive support for the CTF-60 Task Group while conducting invaluable mobilization training.

- Reserve Composite Squadrons provided over 5,000 hours of services to fleet units by participating in Dissimilar Air Combat Training, acting as target aircraft for air intercept training and radar tracking exercises, and by performing the role of aggressor aircraft in fleet exercises.

- Reserve transport squadrons furnish the entire domestic fleet logistic support and augment the Mediterranean, including the Lebanon Multinational Contingency Force, on a regular basis. C-9B's also routinely deploy to the Western Pacific. Of particular note, a Naval Reserve C-9B helped evacuate wounded Marines and sailors to hospitals in Italy and Germany after the terrorist bombing at the Beirut airport, and four Reserve C-9B's contributed airlift support during the Grenada Operation.

- Naval Reserve force ships include modern FF-1052 and FFG-7 frigates and special boat units under operational control of fleet commanders. Using mixed active/inactive crews, they integrate fully into fleet exercises and underway training schedules. For instance, NRF ships participated in Solid Shield 83 and Varsity Player 83, and NRF fleet tugs provided target tow services to fleet ships during weekend training.

- Shore Intermediate Maintenance Activity Reserve units provided more than 83,000 mandays during Fiscal Year 1983 in direct support of ship overhaul and rework projects at intermediate maintenance level activities. For example, the Naval Reserve Maintenance Training Facility in Orange, Texas, built and delivered to the fleet 100 boiler inspection devices at a cost savings to the Navy of $1,600 per unit.

- The Reserve Naval Construction Force, which constitutes 68% of Navy's total construction force structure, contributes approximately 35,000 mandays yearly at various stateside and overseas projects. These projects have included rehabilitating facilities at the Naval Recreation Center, Solomon's, Maryland; Naval Station Guantanamo Bay; and Naval Station Panama.

- More than one third of all intelligence information processed for day-to-day fleet support is produced by Naval Reservists. Intelligence Units also stand watches on a regular basis, including CNO and Fleet Commanders-in-Chief intelligence plots.

- Supply Systems Command units participate in stock control, warehousing, traffic management, stock purification, materials identification, and other areas covering the entire spectrum of the Naval Supply Systems Command's tasks and responsibilities.

- Cargo Handling Battalions assisted active commands in movement of cargo for storage and load-out of deploying units.

One instance of support to the active Navy by Naval Reservists is particularly noteworthy. Recently, 135 Navy Selected Reservists were picked from over 850 volunteers to relieve regular crew members of USS NEW JERSEY so that those crew members could take holiday leave. Reserve C-9's provided the airlift for transporting both the Reservists and the regular crew members to and from USS NEW JERSEY. This program proved so successful that it will continue for two more rotational cycles, which we expect will involve more than 200 additional Selected Reservists.

FISCAL YEAR 1985

The program for the Naval Reserve in Fiscal Year 1985 is one of continued growth and modernization. It is based on our accomplishments to date and reflects the support of the Navy to ensure that the Naval Reserve becomes fully capable of performing its assigned missions and tasks. Our Fiscal Year 1985 program calls for increased Reserve personnel strength, accelerated force modernization and increased funding support.

Reserve Personnel Strength

The average paid drill strength requested for Fiscal Year 1985 is 105,688. This reflects an acceleration of phased growth to meet our Selected Reserve requirements, as validated by the Navy Manpower Mobilization System (NAMMOS). Our plan calls for reaching 110,000 of these Selected Reservists in Category A by the end of Fiscal Year 1985.

An essential part of our Selected Reserve growth plan is the new non prior service accession program, the Sea and Air Mariner, or SAM, which we introduced this year. Approximately 50% of our total enlisted requirement is for E4 or below personnel. The Naval Reserve has over 17,000 vacancies in this area today.

The SAM program offers a variety of initial skill training options. They include the traditional Navy "A" school, a program for split summer training for high school juniors and for seniors who are planning on college, and an advance pay grade program which gives credit for civilian acquired skills. Those personnel training for designated critical skills may receive either a $2,000 Enlistment Bonus or as much as $4,000 in Educational Assistance. All SAMs will attend Navy Basic Training and either "A" school or the Apprenticeship Training Program. It is important to note that twenty percent of the NAMMOS E4 and below billet requirements do not call for traditional Navy "A" school training.

The SAM program will not only enable us to fill many of our vacant positions for junior enlisted members in our ships, squadrons and medical support units, it will also add a new measure of vitality to the Naval Reserve.

Our planned accession level of new Sea and Air Mariners translates into an average strength of 3,303 during the year with an end strength of 2,640 in Training Category F.

A program for direct accession of officers into our Selected Reserve is under development for implementation in Fiscal Year 1985, as a method of resolving our junior officer shortages.

The planned strength of personnel in the Individual Mobilization Augmentee (IMA) program increases to an average strength of 659 and to an end strength of 750.

We are requesting an increase of 1,564 in the end strength of Reservists on full-time active duty (TARs) in support of the Naval Reserve growing to 15,410 by the end of Fiscal Year 1985. Part of this growth (180) is the result of a further identification of Reserve Program billets and the requirement to account for them in the Reserve Personnel, Navy (RPN) appropriation. The remaining 1,384 represent program growth and are required for transition to A-7E and SH-2F aircraft and manning improvements in other squadrons (213); the manning of the second two Oliver Hazard Perry class frigates (FFG-7's), less the manning associated with decommissioned Naval Reserve Force (NRF) ships (35); further expansion of our Shore Intermediate Maintenance Activities (SIMA's) (392); establishment of a Master Augment Unit and Squadron Augment Units (389); increases in aviation base operation and headquarters support, primarily for recruiting and processing support for the SAM program (286); and an associated increase in the transient account, plus intelligence program and headquarters support (69).

These various categories of Naval Reservists result in a Fiscal Year 1985 request for an average strength of 124,200, with a planned end strength of 128,800 as indicated in the following table:

NAVAL RESERVE STRENGTH REQUEST

	Average Strength	End Strength
Selected Reserve-CAT A (48 drills/2 weeks ACDUTRA)	105,688	110,000
Training Pipeline-CAT F (while on initial ACDUTRA only)	3,303	2,640
Individual Mobilization Augmentees-CAT D (2 weeks ACDUTRA only)	659	750
Full-time support Personnel (TARs and Section 265 recalls)	14,550	15,410
TOTAL	124,200	128,800

Force Structure and Equipment

Equipment Modernization

As Secretary Lehman has stated, the Naval Reserve must be capable of providing immediate augmentation to the active force in time of emergency across the entire spectrum of warfare. He also noted that "to implement that common sense policy requires providing the Reserves with equipment compatible with the active forces." I am pleased to report that the comprehensive modernization program for the Naval Reserve continues to accelerate.

The implementation of the NRF ASW Frigate Plan is on schedule. Six FF-1052 class frigates are already in the force, and the first of three FFG-7s programmed for this year, USS DUNCAN, was received on schedule in January. The Naval Reserve ASW force will continue to build until 8 FF-1052's and 16 FFG-7's are in the force in 1988. This program will probably be expanded to a 26 ship level by 1990. These ships will be augmented by SH-2F LAMPS MK 1 helicopter squadrons, the first of which will join the Reserve force in 1984. All NRF ASW ships will have Reserve SH-2F detachments assigned. A major portion of organizational and intermediate maintenance for these ASW ships will be provided by collocated Naval Reserve Shore Intermediate Maintenance Activities (SIMAs). We now have four of these facilities in operation with more to follow as homeporting plans are finalized.

The Naval Reserve Force currently comprises eighty-five percent of the total Navy Minesweeper (MSO) capability. As these older ships are decommissioned, they will be replaced in the NRF by new Mine Counter Measure (MCM) and Minesweeper Hunter (MSH) ships, both of which will have significantly increased capabilities.

The portion of our structure devoted to medical programs will expand significantly, since the mobilization requirements for Healing Arts personnel have increased from 4,500 in Fiscal Year 1982 to over 17,000 by the end of Fiscal Year 1985. These requirements are for backfilling Naval Hospitals as active duty staffs are reassigned to meet contingency requirements, and for supporting Fleet Hospitals, Fleet activities, and the Fourth Marine Division/Wing Team.

Transition training supporting the integration of the F/A-18 into the Naval Reserve is proceeding as scheduled. VFA-303, the initial squadron, was established in January 1984 and will continue to operate and maintain Fleet Readiness Squadron (FRS) aircraft until receiving their own in 1986. That same year, our second squadron, VFA-305 from NAS Point Mugu, California, will also be established.

The introduction of the A-7E into the Naval Reserve has been accelerated. The first squadron completed transition this year; a second squadron will transition next year. We are making every conceivable effort to replace our A-7B aircraft, which have been plagued by chronic engine problems.

Although the transition of the first squadron to the E-2C aircraft was not programmed until Fiscal Year 1984, the transition occurred in May of last year. The remaining squadron is programmed for transition in Fiscal Year 1988.

Our Reserve fighter force is also being modernized. The two remaining F-4N squadrons are in transition to the more capable F-4S. In Fiscal Year 1985, we will introduce the first F-14's into the Naval Air Reserve as replacements for the F-4S assigned to the other two fighter squadrons.

These improvements will permit our Reserve carrier air wings to operate the front line aircraft necessary to meet projected operational requirements in countering the emerging threat.

Although our carrier air wing modernization program does not yet provide for replacement of EA-6A (EW) or KA-3B (tanker) aircraft, or the introduction of the A-6E or S-3 aircraft into the Naval Reserve, the Navy is addressing these issues.

The SH-2F Lamps MK 1 is also on schedule, with the first squadron transitioning this year. The second squadron will follow in Fiscal Year 1985. A third squadron will be established in Fiscal Year 1986.

The TACNAVMOD program will upgrade the Naval Reserve P-3A/B Maritime Patrol aircraft to meet the ASW threat of the 1980's. We will have the 13 VP RESFORONs TACNAVMOD equipped by Fiscal Year 1986, an acceleration of more than a year over last year's plan. All 134 Reserve aircraft will be modified by the end of Fiscal Year 1987. To date, 61 modification kits have been procured for the Naval Reserve. Twenty-seven kits will be procured from Fiscal Year 1984 funds. The balance of the requirement will be met by the reassignment of already modified aircraft to the Naval Reserve from the active force by the end of Fiscal Year 1987.

The schedule for replacing the retiring C-118 aircraft with used commercial DC-9's has accelerated, primarily as the result of congressional support. Two DC-9's were procured last year. We are reviewing responses to our Request for Proposal (RFP) to procure two additional aircraft with the $14.1 million still available from funds provided by Congress for the Naval Reserve in the Guard and Reserve Equipment appropriation for Fiscal Year 1983. In addition, the Navy has released the RFP to solicit bids to procure eight additional used DC-9's with the $51 million provided by Congress in Fiscal Year 1984. The Aircraft Procurement, Navy (APN) appropriation request for Fiscal Year 1985 includes $33.9 million to procure DC-9 aircraft, since the $51 million provided in Fiscal Year 1984 may not be sufficient in today's volatile used aircraft market. We plan to procure up to the required total of 10 DC-9's.

Major equipment shortfalls still remain in many areas of the Surface Reserve. The most significant areas are in the Mobile Construction Forces, Cargo Handling Battalions and Beach Groups. These shortages include major equipments such as earth moving equipment, trucks, trailers, weight handling equipment and a sizable shortage of tools, clothing, bedding, tents, etc. The Navy has an aggressive plan to address these shortages throughout the Five Year Defense Plan (FYDP). We still have some shortages of medical equipment. However, most requirements for Marine Corps support units were funded in Fiscal Years 1983 and 1984.

Fiscal Year 1985 Force Structure

The Naval Reserve is programmed to contain the following commissioned units by the end of Fiscal Year 1985:

32 Ships
  1 Destroyer (DD)
  11 Frigates (FF)
  17 Minesweepers (MSO)
  2 Tank Landing ships (LST)
  1 Salvage Ship (ARS)

4 Special Boat Units (numerous craft)
17 Mobile Inshore Undersea Warfare (MIUW) Units
17 Mobile Construction Battalions (MCB)
6 Cargo Handling Battalions (CHB)

52 Squadrons of Aircraft:
  2 Carrier Air Wings (CVWR)
    4 Fighter Squadrons (VF)
    1 Strike-Fighter Squadron (VFA)
    5 Attack Squadrons (VA)
    2 Light Photographic Squadrons (VFP)
    2 Carrier Airborne Early Warning Squadrons (VAW)
    2 Tactical Electronic Warfare Squadrons (VAQ)
    2 Aerial Refueling Squadrons (VAK)

  2 Patrol Wings (RESPATWINGS)
    13 Patrol Squadrons (VP)

  1 Helicopter Wing (HELWING RES)
    2 Helicopter Anti-submarine Squadrons (HS)
    2 Helicopter Anti-submarine Squadrons, Light (HSL)
    1 Helicopter Combat Support Squadrons (HC)
    2 Helicopter Attack (light) Squadrons (HAL)

  1 Fleet Logistics Support Wing (FLELOGSUPWING)
    12 Fleet Logistic Support Squadrons (VR)
    2 Fleet Composite Squadrons (VC)

The Naval Selected Reserve also has over twenty-five hundred Reinforcing and Sustaining units organized and trained to support the following Naval programs:

Submarine Forces
Mine Forces
Mobile Logistics Support Forces
Surface Combatant Forces
Air Forces
Construction Forces
Amphibious Forces
Marine Corps
Special Warfare Forces
Major Fleet/Force Commands
Unified/Joint Shore Commands
Support of Allies
Telecommunications
Security Group
Intelligence
Oceanography
Research
Shore Intermediate Maintenance Activities
Military Sealift
Naval Control of Shipping
Bases and Stations
Naval Material Command
Air Systems
Electronics Systems
Facilities Engineering
Sea Systems
Civil Defense
Supply Systems
Merchant Marine
Medical
Training
Personnel Systems
Public Affairs
Law
Chaplain
Selective Service

NAVAL RESERVE FUNDING REQUEST

The Naval Reserve is supported primarily by two appropriations: Reserve Personnel, Navy (RPN) and Operation and Maintenance Navy Reserve (O&MNR). The President's Budget also requests over $70 million in the Aircraft Procurement, Navy (APN) appropriation to be used for procurement of used DC-9 aircraft and necessary modifications for Navy Reserve aircraft, plus more than $14 million in the Other Procurement, Navy (OPN) appropriation.

The OPN funds are earmarked for various support and training equipments including Shore Intermediate Maintenance Activities (SIMA) equipment, cryptological equipment, Civil Engineering Support Equipment, Shipboard Simulators (SBS's), and Damage Control Trainers (DCT's) to train our ship reinforcement units.

Further, the Military Construction, Naval Reserve (MCNR) Appropriation request of $60.8 million will provide much needed facilities construction, design, and land acquisition for the Naval and Marine Corps Reserve. The total support for the Naval Reserve exceeds $2 billion for Fiscal Year 1985.

I would like to discuss the Reserve Personnel, Navy and Operation and Maintenance, Navy Reserve appropriations in some detail.

Reserve Personnel, Navy

The Reserve Personnel, Navy (RPN) appropriation is divided into two budget activities. Budget Activity One provides funding for Unit and Individual Training. Budget Activity Two provides funding for Other Training and Support, including active duty TAR personnel, the Naval Reserve Officer Training Corps, Armed Forces Health Professions Scholarship program, and the Navy Junior Reserve Officer Training Corps. The total Fiscal Year 1985 RPN appropriation request is for $1,131.6 million, which consists of $588.2 million for Budget Activity One and $543.4 million for Budget Activity Two.

This funding request will support an average strength of 124,200 Naval Reservists in a paid status, including 14,550 full-time support personnel (TARs). This reflects an increase of $364.7 million over Fiscal Year 1984. Retired pay which, beginning with Fiscal Year 1985, will be accrued in each of the military personnel appropriations, accounts for $283.3 million. Additional costs associated with the 1 January 1984 pay raise are $9.9 million, and $3.0 million is for price escalation. Increased Variable Housing Allowance cost for full-time support personnel accounts for $2.7 million. Program growth is $65.8 million.

The average strength of the drilling Reserve will increase 6,946 and the average strength of full-time support personnel will increase 1,754. There is a thirty-three percent increase in number of annual active duty training periods allocated for members of the Individual Ready Reserve, and a ten percent increase in mandays for school and special active duty for training periods. Enlistment and reenlistment bonuses will increase $2.3 million, mostly for Sea and Air Mariners.

The requested increases will allow the Naval Reserve to comply with Congressional guidance to increase Reserve manning for Naval Reserve Force ships and to continue our growth in Selected Reserve strength to meet NAMMOS requirements.

Operation and Maintenance, Navy Reserve

The other major appropriation which supports the Naval Reserve is Operation and Maintenance, Navy Reserve (O&MNR). The Naval Reserve is dependent upon funds in this appropriation for support of mission forces, depot maintenance, and other support. Mission Forces includes funds for fuel, intermediate maintenance, repair parts and related support for the operation of aircraft in both the Naval and Marine Corps Reserve. It also includes operating and maintenance funds for Naval Reserve Force (NRF) ships. Depot Maintenance includes funds for the rework of aircraft and engines, the installation of aircraft modifications, and Contractor Engineering Technical Services support. Other Support provides funding to operate and maintain the Air Stations, Reserve Centers, and Reserve Facilities supporting Naval Reserve forces and for various command and administrative activities, including recruiting.

The funding requested for the O&MNR appropriation for Fiscal Year 1985 is $829.5 million, which is a $193.0 million net increase over the Fiscal Year 1984 funding level of $636.5 million. Mission Forces (Budget Activity 1) increases $104.3 million, Depot Maintenance (Budget Activity 2) increases $63.4 million and Other Support (Budget Activity 3) increases $25.3 million. Program growth is $138 million, $73.6 million of which results from the migration of aviation depot level repairables (AVDLRs) to customer funding.

The increased funding level will provide additional support for the following areas of significant growth: increased aircraft operating, maintenance and rework costs in support of a more modern mix of aircraft and the Squadron Augment Unit (SAU) program; increased operations, maintenance and modernization costs resulting from growth in the Naval Reserve Force ASW Frigate Program and a more costly mix of ship overhaul requirements; implementation of the mine countermeasures Craft of Opportunity (COOP) program; and increased training, equipment, and base operating support requirements concomitant with growing Selected Reserve strength levels as the Naval Reserve builds towards the Navy Manpower Mobilization System (NAMMOS) goal.

In addition, the O&MNR appropriation increases by $8.7 million to support Naval Reserve recruiting and advertising activities. Of that amount, $5.6 million represents a functional transfer from the O&MN appropriation to provide proper program visibility in light of the expanding role of the Naval Reserve, and the remainder is required to support increased recruiting efforts for the Sea and Air Mariner (SAM) program.

Although we increased our funding request for Real Property Maintenance by approximately $5.6 million, we will still not be able to meet the Congressional Containment Policy to limit the backlog of nondeferrable Maintenance and Repair to the Fiscal Year 1978 year-end level of $20.7 million.

The Naval Reserve Force (NRF) ship operating tempo of 14.7 days per quarter funded through O&MNR remains at parity with previous years. The Fiscal Year 1985 flying hour program is funded at 85 percent of the Primary Mission Readiness (PMR) level, an increase from the 83 percent in this year's program.

SUMMARY

There have been many improvements in the readiness and capabilities of the Naval Reserve in recent years. Our personnel strength is growing, training is improving, and the force is being modernized.

Our request for Fiscal Year 1985 supports accelerated progress in all these areas. Each proposed improvement will enable the Naval Reserve to become a more effective part of Navy's Total Force designed to meet the national strategy.

The Naval Reserve's contributions to this strategy are recognized fully by the Navy. The recent report to congress, "A report to the Congress on the Navy's Total Force", outlines these capabilities in some detail and provides a discussion of proposals which are under review to place additional capability in the Naval Reserve.

We are improving the Naval Reserve today to ensure it can meet the challenges of tomorrow.

I will be happy to respond to any questions or provide any additional information you may request.

MARINE CORPS RESERVE

STATEMENT OF MAJ. GEN. STEPHEN G. OLMSTEAD, USMC, DEPUTY CHIEF OF STAFF FOR RESERVE AFFAIRS, HEADQUARTERS, U.S. MARINE CORPS

STATUS OF MARINE CORPS RESERVE

General **OLMSTEAD**. Mr. Chairman, members of the committee, it is a distinct privilege to report today, both to the Congress and to the American people, that confidence in the U.S. Marine Corps Reserve is well-founded. We are strong, and this is through the dedication and professionalism of the Marines.

Capable through the concept of total force, and the continuing support of the Congress, the Marine Corps Reserve is a program which is very vastly improved over that of the decade past. We are enthusiastic for our participation in the future.

RECRUITMENT PROGRAMS

When one looks at the triad that makes up readiness, we first talk about people. We have confidence in that realm because we are recruiting at 106 percent of our quota right now. The people we are bringing in meet the standard of 96 percent high school graduates, and perhaps even more impressive, less than 1 percent are category IV mental groups.

Second, I think the training we do is training which is imaginative, it is training that is realistic, it is the type of training that we would call upon our reservists to do if they were mobilized. For example, we just brought back the New England battalion from training in northern Norway, a very realistic atmosphere for them to be in.

We are getting better equipment. Our goal is to have complete comparability with the regular forces, both on the ground and in the aviation component of the Marine Corps Reserve.

In summary, Mr. Chairman, and members of the committee, the Marine Corps Reserve has good people, and good training, and we are getting good equipment.

I look forward to your questions, sir.

[The prepared statement of General Omstead follows:]

PREPARED STATEMENT OF MAJ. GEN. STEPHEN G. OLMSTEAD

UNITED STATES MARINE CORPS

DEPUTY CHIEF OF STAFF FOR RESERVE AFFAIRS

Mr. Chairman, distinguished members of the Committee:

It is a distinct privilege to report today, both to the Congress and the American People, that confidence in the United States Marine Corps Reserve is well founded. Strong, through the dedication and professionalism of Marines; capable, through the concept of "total force", and the continuing support of Congress; the Marine Corps Reserve is a program vastly improved over that of the decade past, and enthusiastic in the anticipation of a bright future.

Initiatives originating in the early years of this decade are bearing intended results. The dynamics of growth and equipment modernization are producing a revitalized force, as units become more capable. Confidence in individual reservists and their commanders is now also evidenced in Marine Corps total force planning, which finds reserve units assuming real world contingency missions for the first time. The early 1980's have been years of renaissance, and enthusiasm is justified in the result thus far. This momentum must continue.

PERSPECTIVE

"Total Force" and the Role of the Reserve

The reserve component has a vital role in the Marine "total force". It provides a necessary capability for rapid force expansion at a time of crisis. Fully trained and equipped units along with qualified individuals must stand ready to provide critical combat resources upon mobilization. As a result of the Corps' total force policies and attention to the problems involved with mobilization, this reserve role is executable today. Improved capabilities are planned for the future.

The concept of "total force" is not new. Over the years it has become ingrained in the Corps' decision making mechanisms. The Marine Corps Capabilities Plan, and policy directives as early as 1977, laid the foundation for total force planning by stipulating likely reserve employment roles. Specifically, the Selected Marine Corps Reserve (SMCR), comprised primarily of units from the Fourth Division/Wing Team, will provide:

- Trained units to selectively augment the active forces in order to field three MAFs at full wartime structure.
- Trained units to reinforce the active forces.
- An Amphibious Brigade (MAB) or, if augmentation/reinforcement is not ordered, a full Division/Wing Team (DWT).
- A nucleus to reconstitute a DWT.

In order for the Reserve to be capable of executing these missions, a "total force" planning system must exist. Planners, with an understanding of component roles, and an acute awareness of Marine Corps requirements for a standing force, create the best possible active/reserve "force mix" within operational and budgetary constraints. This process begins with annual preparation of planning documents, such as the Mid-Range Objectives Plan (MMROP), the Capabilities Plan (MCP), and the Mobilization Management Plan (MPLAN). Aligned with national defense objectives, these documents respond to requirements developed by operational planners at the CINC level. With this basis, the Department of Defense's Planning, Programming, and Budgeting System (PPBS) then lends fiscal reality to the planning. Viewed in its entirety, this regimen is a system of program competition, attrition, development, and reflection. It is a dynamic, methodical, decision making "discipline" which is complex, yet mechanically straightforward and effective. The active/reserve "force mix" existing today, and the Marine Corps' plans for the future are a direct result of this process.

Organization and Contributions

The vitality and importance of reserve programs is evident in an examination of the Ready Reserve and its contributions to the total force. Most commonly identified with the term "Reserve" are drilling Marines of the SMCR. This force is comprised of approximately 43,000 Marines, a majority of whom belong to a Division/Wing Team. These reservists train and will be deployed in units which "mirror" their active counterparts. Additionally, drilling reservists also serve as Individual Mobilization Augmentees. These Marines train in preassigned mobilization billets in the active supporting establishment, and are crucial to the success of mobilization efforts.

While the Selected Reserve responds to the need for trained units, the primary source of trained individuals is the Individual Ready Reserve (IRR). This group consists primarily of prior service personnel with obligated service remaining. Some of these individuals are preassigned to critical mobilization billets. Others will be assigned to enable Marine Corps units to deploy with their full wartime strength. Through an effective mobilization process, the Corps has the ability to rapidly assimilate the skill and experience of these individuals into the total force.

The Reserves represent one-fourth of the structure and one-third of the manpower in the Total Marine Force. While this, in itself, represents a major impact, further identification of reserve contributions in specific areas is even more instructive. For example, 40% of the tanks, 33% of the heavy artillery, 30% of light attack aviation, and 33% of the anti-aircraft missile capability are in the reserve structure. Additional contributions are listed in the following table:

TABLE I

RESERVE TOTAL FORCE CONTRIBUTIONS

40%	TANKS
33%	HEAVY ARTILLERY
40%	BEACH/PORT OPNS CAPABILITY
25%	BULK FUEL HANDLING CAPABILITY
67%	FORCE RECON CAPABILITY
100%	CIVIL AFFAIRS CAPABILITY
30%	LIGHT ATTACK AVIATION
14%	HELICOPTERS
24%	OBSERVATION AIRCRAFT
33%	LAAM CAPABILITY
25%	FAAD CAPABILITY

As the Marine Corps must change in response to requirements, so must its Reserve. Programs evolve with an analysis of the threat, the development of new tactics, and the employment of new combat systems. An examination of these programs and their applications within the Marine Corps Reserve finds that they are well conceived.

STATUS OF PROGRAMS

Budget

A significant factor in the improved outlook for Reserve programs is improved funding. During a three year period from 1980 to 1983, the two Marine Corps Reserve appropriations increased by nearly 90%. By comparison, from 1977 to 1980 these appropriations grew by only 31.8%. Predictably, funding profiles paralleled the tempo of change. With added dollars significant advancement toward mobilization and combat readiness goals has been made. The ultimate achievement of these goals is dependent upon maintaining the programmed funding levels.

The FY 1985 Reserve Budget Request of $328.1 million will support both enhancement initiatives and an SMCR end strength of 46,447 (44,300 average strength). This funding represents 3.7% of the overall Marine Corps budget, and an average real growth of 10%. The Revised FY 1984 amount of $231.9 million contains supplemental funding of $3.4 million (RPMC) and $0.2 million (O&MMCR) to fund the military and civilian pay raise that became effective on 1 January 1984.

TABLE II

FUNDING COMPARISION - FY-84/FY-85

RESERVE APPROPRIATION	REVISED FY 1984	BUDGET REQ FY 1985
Reserve Personnel, Marine Corps (RPMC)	$179.6M	$269.5M
Operation & Maintenance Marine Corps Reserve (O&MMCR)	52.3M	58.6M
TOTAL	$231.9M	$328.1M

Within the FY 1985 RPMC budget, $189.9 million is programmed to support pay and allowances, subsistence, clothing and operational travel for units and individuals during drills and annual training. School and special tour requirements are supported with $79.6 million, which also funds the Full Time Support (FTS) Program, Incentives Program, Platoon Leaders Course, and the Junior Reserve Officers Training Corps. The RPMC increase of $89.9 over FY 1984 was necessitated by the addition of retired pay accrual ($65.2M) to the budget, and planned end-strength increases within the SMCR and FTS programs. These added reservists are required to support new units, new equipment, and restructuring within the Fourth Division Wing Team.

For operations and maintenance, the FY 1985 O&MMCR Budget Request of $58.6 million supports program requirements in training, organization, and administration. Included in this amount is $5.2 million required to support increased strength, additional NBC equipment, body armor, and equipment transportation requirements.

Adequate funding levels are a critical factor in the advancement toward reserve manpower, equipment, and combat readiness goals. Continuing Congressional support is solicited in maintaining the momentum.

Manpower

The heart of the Marine Corps Reserve is its manpower. Professionally trained, skilled and well educated, these "Citizen Marines" are highly motivated to accomplish their mission. Manpower programs initiated at the beginning of this decade to increase the size and improve the quality of personnel in the Marine Corps Reserve are meeting their objectives. At the end of FY 1983, SMCR strength was 42,690, a growth of 2,229 over FY 1982. The current program calls for a FY 1985 end strength of 46,447. From the beginning of the decade, SMCR strength has increased 28% or 9,334 individuals, and further growth is attainable. Because of their continuing interest and support, Congress shares in this success.

Quality of the SMCR has improved in spite of rapid growth. Through careful planning and execution the Marine Corps Reserve is successfully recruiting individuals possessing high educational and mental qualifications. In FY 1983, 94% of the non-prior service accessions were high school graduates versus only 76% in FY 1980. This percentage is increasing as a result of Marine Corps Recruiting Service initiatives. Overall, 93% of SMCR personnel are now high school graduates. The quality recruiting effort is also exemplified by mental group IV enlistments which have declined 59% since FY 1981, while mental group I enlistments have increased nearly 17%.

The Marine Corps Reserve has launched an effort to improve skill match within units. Operational only since February 1983, the Reserve Prior Service Recruiting Force has been given a mission targeted to ensure only those individuals with the proper grade and skill are enlisted. Optimism that they will meet this goal numerically in small and geographically fixed markets has proved to be well founded. An analysis at the end of FY 1983 showed that 89% of the prior service individuals enlisted met grade and MOS requirements. The remaining individuals were of such high caliber that it was considered in the best interests of the Marine Corps Reserve to acquire their talent and then retrain them in a needed skill. Pinpointing within each SMCR unit the rank and skill required, the Recruiting Service achieved a 78% match for Fourth Marine Division requirements from March through September, 1983. Notwithstanding an even more detailed plan this year, a 99% match for the first quarter of FY 1984 was achieved.

While the identification and mobilization of proper MOS skills is vital within the SMCR, it is also one of the factors involved with proper management of the IRR. The Marine Corps Reserve Support Center (MCRSC) located in Overland Park, Kansas, responds to this need. This organization is responsible for over 113,000 individuals which includes members of the IRR, the Standby Reserve, the Retired Reserve, and the Fleet Marine Corps Reserve. Additionally, present plans will require MCRSC to assume management, for mobilization purposes, of 87,000 regular retired personnel beginning in FY 1985.

MCRSC is a key institution in the mobilization process, and it is continuing to improve capabilities through office automation and extensive use of automated data processes. A major advancement in this area will occur this fiscal year with the installation of an "in-house" computer. This is a manpower management milestone achieved directly through the funding support of Congress.

Full Time Support

Reserve Full Time Support (FTS) is a program which also contributes significantly to accomplishment of the Reserve mission. Highly qualified Marine reservists return to active duty for 1 to 4 year periods specifically in support of the Reserve.

These personnel prepare and administer MCR policies, and assist in recruiting, organizing, instructing, and training members of the reserve component. The program also has an effect similar to our Formal Schools Programs, in that it helps to further the professional development of individual reservists. The Reserve FTS program has expanded from 67 individuals in FY 1980 to 801 in FY 1984. Now assigned to eighteen major commands, FTS strength is plannned to reach 1129 by the end of FY 1985. This program and the continued dedication of these highly professional reservists will be major factors in the success of many structure and combat readiness initiatives.

Material and Logistics

While manpower programs are of extreme importance, on today's "high-tech", fast moving battlefront, a highly trained Marine may be only as capable as his equipment. Reserve equipment profiles must keep pace with requirements, and procurement for the Reserve is a vital portion of the Marine Corps' "total inventory objective". This objective ensures that equipment requirements for active and reserve units are determined in concert. Attention is applied to achieving and maintaining an equipment inventory which provides "state of the art" employment capability, supportability, interoperability, and sustainability for the entire force.

During the past year, the Reserve has continued to improve its equipment posture. Although full wartime requirements have not yet been achieved, 94% of the standard combat equipment required for training is now onhand. Reserve units today are capable of accomplishing their primary mission of producing trained units and qualified individuals for duty in time of national emergency.

Modernization of equipment in the reserve component is facilitated by the Marine Corps' "single acquisition objective". As a result of this mechanism, equipment upgrading within an SMCR unit corresponds to that of its active counterpart. Modern equipment is extremely important in the Reserve. It influences recruiting and retention of personnel, in addition to upgrading overall unit capabilities. Some examples of SMCR equipment modernization are listed in Table III.

TABLE III
EQUIPMENT MODERNIZATION

PRESENT EQUIPMENT	NEW EQUIPMENT	FIELDING
M19 60MM Mortar	M224 Lightweight 60MM Mortar	FY 83
AN/MRC-123/124 Radio	AN/MRC-138 Radio Set	FY 83
AN/PRC-47 Radio Set	AN/PRC-104 Radio Set	FY 83
M60A1 Tank	M60A1 RISE/Passive Tank	FY 84
LVT7A1 Landing Veh	LVT7A1 Product Improvement	FY 84
M16A1 Rifle	M16A2 Rifle	FY 84
M880/M886/M893 Light Cargo Truck	CUCV Truck Cargo, Ambulance and Utility	FY 84
M44 Series 2 1/2T M39 Series 5T	Retrofitted 5 Ton/M900 Series	FY 84

M151 Jeep, M561 Gama Goat, M72 & M718A1 Ambulance, M101 & M416 1/4T Cargo Trailors	HMMWV Truck, Cargo, Ambulance, Armament, and Shelter Carrier	FY 85
M16A1 Auto Rifle	M249MG, Squad Auto Wpn (SAW)	FY 85
No present system	M2 MG, Cal 50	FY 85
No present system	Motorcycle, Utility	FY 85
No present system	MK-19 MG 40MM	FY 85
M123 10T Tractor Truck and Trailers	Logistics Vehicle System (LVS)	FY 85
M202 Rocket Launcher	Shoulder Launched Multipurpose Assault Weapon (SMAW)	FY 86
Nonstandard Shelters	Marine Corps Expeditionary Shelter System (MCESS)	FY 87

Reserve units hold only that amount of equipment needed to train and maintain proficiency. The remainder of their full wartime equipment requirement is to be stocked at the Marine Corps Logistics Bases for issue upon mobilization. These stocks are not yet adequate to satisfy the total SMCR requirement. Current programs will essentially eliminate this shortage in both active and reserve components by FY 1988. In this effort, FY 1984 and FY 1985 Marine Corps procurement funds for the Reserve have been allocated as shown in the Table that follows.

TABLE IV

PROCUREMENT FUNDS BY COMMODITY AREA

BUDGET ACTIVITY	FY 1984	FY 1985
2-Weapons and tracked combat Vehicles	$4.9M	$137.3M
4-Communications and electronics	21.7M	23.7M
5-Support vehicles	34.5M	62.8M
6-Engineer and other equipment	9.5M	12.9M
TOTAL	$70.6M	$236.7M

STRUCTURE MODERNIZATION AND ENHANCEMENT

Ground Force

Equipment modernization, force expansion, and the development of improved employment concepts have mandated certain structure changes within the Fourth Marine Division and Force Service Support Group. Two additional Civil Affairs Groups will be activated in the Division, one this fiscal year and the other in FY 1985. Upon their activation, the reserve component's three Civil Affairs Groups will represent the Marine Corps entire capability in this area. Another significant change will occur within infantry regiments during FY 1985. Battalions will be reorganized and re-equipped to mirror their changing active counterparts. When this is complete, the fire power of each infantry battalion will have increased, yet the structure will have decreased by 83 enlisted men. Other structure enhancements for FY 1985 include activations of a second Air-Naval Gunfire Liaison Company (ANGLICO), two Salvage Platoons, and one Bridge Platoon. The two Reserve ANGLICO's will constitute 67% of the Corps total capability, while the additional salvage and bridge platoons will provide needed enhancements in combat service support.

Continuing the momentum beyond the budget year, plans call for a substantial change in artillery organization and equipment. Reserve Direct Support Artillery Battalions will begin reorganizing in FY 1986 for receipt of the M198 155mm towed howitzer, thus acquiring an increase in firepower. It is anticipated that the structure transition will be completed in FY 1988, with delivery of the M198 Howitzer scheduled for completion in FY 1989. An additional Sensor Control and Management Platoon is sought in FY 1986. An LAV Battalion will be structured in the Reserve in concert with active force LAV initiatives. Of four TOW Platoons to be activated in FY 1987, one platoon completes the Anti-Tank Company within the 4th Tank Battalion, while each of the others will enhance an infantry regiment with a superior anti-tank capability. Finally, during FY 1988 the Reserve artillery regiment will acquire an essential Target Acquisition Battery.

Aviation Modernization and Enhancement

While it is possible for reserve ground modernization to essentially parallel active force development, the high cost of aircraft and related systems dictates a more prudent approach to reserve aviation programming. Nevertheless, enhanced air combat capabilities within the Reserve Air Wing are of the utmost importance. There is concern over aircraft shortages in the Aerial Refueler Squadron (KC-130), and Attack Helicopter Squadron (AH-1). Aircraft models being flown in the Fourth Marine Aircraft Wing are aging and in need of upgrade. In response, the Marine Corps has developed a long range Aviation Master Plan which addresses the requirements of Marine Aviation in its entirety. The success of this plan is dependent on continued Congressional support of both active and reserve programs.

The transfer of more advanced aircraft models to the Reserve as active squadrons acquire new aircraft is characteristic of this plan. It responds to the requirement for equipping the "first to fight", while ensuring that reserve units are flying the best available aircraft. Reserve fixed wing squadrons are programmed to upgrade to the F-4S and A-4M over the next four years. In the early '90s, when active fighter squadrons have completed transitioning to the F/A-18, reserve units are to follow suit. The Observation Squadron and Heavy Lift Helicopter Squadron will upgrade aircraft to the OV-10D and CH-53D respectively. Simultaneously with the CH-53 upgrade in FY 1992, one of two reserve CH-46 squadrons will transition from Medium (HMM) to Heavy lift missions (HMH). This will result in the fielding of two CH-53 squadrons and an overall increase in reserve lift capability.

Aircraft shortages in the AH-1 and KC-130 squadrons are being addressed. First, the Marine Aviation Master Plan calls for filling the reserve AH-1 Squadron in FY 1988. This unit currently has 8 of their 24 plane requirement. The change parallels increases in the active force and represents major improvement in the Corps' critically short Attack Helicopter capability. Secondly, benefiting from Congressional foresight in FY 1982, the Reserve Wing recently took delivery of four new KC-130T aircraft. These are the first new planes ever delivered to a Marine Reserve Squadron. FY 1983 and FY 1984 appropriations have also funded a total of four additional KC-130 aircraft toward satisfying this critical shortage.

Through equipment modernization and aggressive training, reserve squadrons are demonstrating dramatically improved readiness. Unit commanders now achieve their flight hour programs and call for more. Training with active forces is increasingly pursued and performance is impressive. The fact that three reserve squadrons are now supporting contingency missions is a tribute to, and representative of the dedication, professionalism and ability of the entire Wing. Mobilization plans depend heavily on this reserve capability, and the Marine Corps will continue to ensure its strength.

MOBILIZATION AND OPERATIONAL READINESS

Mobilization

The ability to successfully execute Marine Corps missions during a world wide crisis situation requires a responsive mobilization process. Since exercise Nifty Nugget in 1978, mobilization has been the subject of increased attention, and marked improvement has been achieved in establishing viable procedures and refining the system. During subsequent JCS level mobilization exercises, actual movement of Marine Reserve units and individuals in timely response to CINC requirements has been successfully tested. Unit level response has been improved by "no-notice" Mobilization Operational Readiness Deployment Tests (MORDT) which now ensure a complete understanding of the mobilization process.

In addition to improving unit mobilization, advancements have been made in the process of assimilating pretrained individuals. Current plans call for 45% to 55% of the Individual Ready Reserve to report to active duty within the first 30 days of mobilization. The ability to assimilate this surge in manpower has been advanced by initiatives in the Marine Corps Reserve Support Center described previously. Facilitating MCRSC efforts, the processing structure has been improved by preassigning certain qualified reservists in the IRR to critical mobilization billets.

While the process has improved, a difficulty remains which is deserving of Congressional review. It is the inability of services to obtain Individual Ready Reserve home addresses which are held by other government agencies. Since the availability of these reservists is required early on, accurate addresses are a key for timely notification. Numerous internal actions have reduced inaccuracies. Further improvement, however, requires access to data resources external to the Department of Defense.

Readiness

The "readiness" of men and their equipment is a time honored Marine tradition. Though it is a prime objective of the active force, one must accept nothing less of the Reserve. It is gratifying to report that the Corps' reserve component is as ready today as at any time in history.

Quality training with modern equipment is the primary factor. Current focus is on an increase in reserve participation in active exercises, and in FY 1983 approximately 17,000 reservists trained in 14 major exercises. Participation will increase to almost 25,000 Reserve Marines in an equivalent number of exercises this year. This training improves readiness and tactical proficiency. In FY 1983, testing of reserve units in the demanding Marine Corps Combat Readiness and Evaluation System (MCCRES) found 90% to be Combat Ready. This tactical expertise is complemented with a high state of mobilization readiness, verified by the fact that 93% of the units tested in "no-notice" Mobilization Operational Readiness Deployment Tests (MORDT) in FY 1983 were found to be Ready. These are dramatic changes in direction which have justified the tremendous support for Reserve programs within the Marine Corps and the Congress.

CONCLUSION

The Marine Corps Reserve is a vital force. It is established in total force planning as a reserve in the "classic sense"; ready and available, trained and capable of providing the margin of victory at a time of crisis. Crucial pretrained manpower and combat systems await the call to duty. Though their capability is much improved, the momentum must continue. Dollar requirements are great, but the stakes are high. In a battle for the national defense, Marines fighting side by side will be neither active nor reserve, but rather, the finest total combat force America can produce. The Corps is confident that, with Congressional support, and in the high tradition of Marine history, the Reserve will be ready.

Army National Guard

STATEMENT OF BRIG. GEN. RICHARD D. DEAN, U.S. ARMY, DEPUTY DIRECTOR, ARMY NATIONAL GUARD

READINESS TRENDS

General Dean. I am deputy director of the Army Guard, and I am pleased to discuss the status of the Guard with this committee.

From a historical standpoint, the readiness trends of the Guard are up. Since 1981, our units reporting combat ready by the components of readiness defined by the regulation are 6 percent more combat ready in training, and 5 percent more combat ready in personnel compared to 1981. Two percent more units report cambat ready in MOS qualifications as compared to that year. However, 5 percent fewer units report combat ready in equipment on hand compared to 1981, and I will discuss the reasons for that later.

If you talk to active component inspectors and evaluators, you will find a consensus that the Army Guard is more professional and the force more capable of performing its mission than at any time in its history. The major reasons for this are that we have done our job and we have been equipped by you to do that job.

Placed in terms of relative size, the Guard is the eighth largest army in the world. In 1985, we will add artillery, engineer, transportation, forward support, and field service units to the Army Guard. Additionally, a division support command headquarters will be activated as we continue our organization of the ninth division in the Guard, the 35th Mechanized Infantry Division located at Fort Leavenworth.

INCREASE IN GUARD STRENGTHS

We are continuing our program to increase strength in the Guard, with a paid strength budgeted to reach 433,000 at the end of 1984. This increase equates to 93.6 percent of wartime required strength. A further increase in strength, to over 447,000 is requested for 1985, which equates to 94.9 percent of wartime required strength.

The successes we have enjoyed in the past may not be easily achieved in the future due to a dwindling manpower pool and policies that we have initiated to imporve the quality of the force. In 1983, 63.4 percent of total accessions were high school graduates compared to 69.8 through the first quarter of this year. Test score category IV accessions were 6 percent in fiscal year 1983. For this fiscal year, we want to have no less than 65 percent high school graduates, and no more than 12 percent test score category IV's, and we are well on the way to achieving both.

MANNING

Continuing in the manning area, we are requesting an increase of 9,951 personnel for the Active Guard and Reserve program. These additional AGR's would increase our fulltime unit support levels to nearly 7 percent. These poeple will be used in areas of training, administration, modernization, and logistics.

READINESS

One of the major problems impacting readiness in the Army Guard continues to be shortages of equipment. This is a basic problem throughout the Army. Equipment shortages for wartime requirements for the Army Guard have increased from $4.7 billion at the end of fiscal year 1982 to $11.9 billion at the end of fiscal year 1983. This is based on a wartime requirement of $25 billion worth of equipment and equipment on hand of $13.1 billion.

There are two reasons for this increase. As force structure increases, equipment requirements increase. The second reason is that we are now basing our equipment shortfalls on the cost of modernized equipment. That is, a unit only partially equipped with M48A5's, A5's is now computed as having its shortage filled with M1's which are more expensive.

EQUIPMENT SHORTAGES

The major equipment shortages continue to be in air defense systems, communications equipment, aircraft, artillery, and medical equipment.

Actions by the Army to accelerate deliveries of this equipment to the Guard are ongoing. We received the first issue of M-1 tanks in 1983 for our battalion in North Carolina. M-1's are scheduled to be delivered to two battalions in Mississippi, and one battalion in Georgia in 1985.

Other modern equipment issued and scheduled for delivery in 1985 include M60A3's, the Bradley Fighting Vehicles, Chapparal Air Defense Missiles, Improved TOW's, M198 Howitzers, and AH-1S attack helicopters. As you see, we are getting better equipment, and more of it.

I want to thank you for the support that you have provided for the procurement of the equipment for the Guard. It has enhanced our readiness capability, particularly in the early deploying units.

TRAINING PROGRAMS

The next area I will address is training. We are doing more training in the field environment, as close to combat conditions as possible. We sent our first battalion to train at the NTC, the National Training Center, in fiscal year 1983, the 108th Armory from Georgia. They performed well under realistic and strenuous conditions. A battalion from the Minnesota Guard is there at this moment, and five more battalions will train there in fiscal year 1985.

An increasing number of units are participating in overseas deployment training to include participation with active component units in joint training exercises, such as REFORGER. The Key Personnel Upgrade Program (KPUP) affords Army Guard personnel with additional opportunities to train with active component units and to improve their skills.

For the first time in 1983, Army Guard personnel participated within KPUP in REFORGER with forward deployed active component units, and also participated with active component units at the National Training Center. All of the types of training I have mentioned provide National Guard units and individual soldiers with opportunities to train at levels and under conditions unheard of only a few years ago.

For example, we just finished 15 kilometers of road in Panama. It was a tremendous training project for the Army Guard. It took about 3 months to complete. We have received nothing but praise from the personnel who participated in that training evolution, as well as the governors and the people from the States who have gone to observe the exercise.

In conclusion, I want to thank you for the support you have provided the Army National Guard in the past. We are being asked to do more for the defense of our country and the citizen soldiers of the Guard are ready and willing to do more. We have carefully formulated our fiscal year 1985 budget request submitted for your consideration and request that it be approved.

Thank you sir. I am prepared to answer any questions.

[The prepared statement of General Dean follows:]

PREPARED STATEMENT OF BRIG. GEN. RICHARD D. DEAN

DEPUTY DIRECTOR, ARMY NATIONAL GUARD

INTRODUCTION

The complexion of the Army National Guard (ARNG) and its role in the Total Army Force has changed substantially over the past few years. Increased reliance on the ARNG has resulted in significant increases in force structure and in responsibility for early deploying missions. The size of the force has increased dramatically from 3 6,000 in FY79 to a requested strength of 447,000 in FY85. Modern equipment has been distributed to the ARNG and increasing amounts are planned for distribution in the future. Training for some members has increased beyond the normal 48 weekend drills and 15 days of annual training. The ARNG is being asked to do more and, when given the resources, has demonstrated that it can do more.

The support of Congress is integral to providing the authorizations and appropriations for all ARNG programs. In providing that support, Congress and the American people have a right to expect a fair "Return on Investment" from the resources provided to the ARNG. Although it is difficult to put that "Return on Investment" into the same percentage terms as is commonly anticipated for an investment in a commercial instrument, this statement will show that the resources provided to the ARNG have resulted in improvements to the force and have been wisely utilized.

The statement is broken down into two sections, the first dealing with state missions and the second with Federal missions. State mission responsibility sets the National Guard apart from the other Reserve Components and provides it with local, state, and national visibility as it is mobilized by the states to respond to natural disasters, civil disturbances, and other domestic emergencies. The Federal mission, which is primary, is "to provide properly trained and equipped units available for prompt mobilization in the event of national emergency or war" and is dealt with in detail in this statement.

STATE MISSIONS

Fiscal year 1983 was another active year in which the National Guard was used by civil authorities to respond to emergencies throughout the states and territories. Guard personnel responded to 511 call-ups in 48 states and territories continuing a trend to utilize the training and expertise of National Guard forces to respond to civil emergencies. The total of 511 call-ups involved 10,630 Guard personnel and required 60,300 mandays. An analysis of the civil emergency support missions finds the ARNG responding to a never ending onslaught of extreme weather which brought record snow, rain, cold, and heat affecting many states. During Hawaii's first major hurricane in 23 years and California's worst earthquake since the San Francisco quake of 1906, ARNG soldiers came to the support of residents and communities. This was also a period in which the National Guard played a more active role in support of law enforcement drug control operations. Use of fewer Guard personnel for state missions is an obvious indication of tighter state budgets as state funds provide pay and allowances to Guard personnel during state emergency duty. The involvement of the National Guard in various types of missions reflects better training and public acceptance of the Guard as a professional emergency force. The statistics regarding state mobilizations in the following two paragraphs pertain mainly to the ARNG but in some cases include situations in which both Army and Air National Guard personnel were mobilized as a joint task force.

Ten civil disturbance call ups in ten states occurred in FY83. However, natural disasters and emergencies other than civil disturbance operations are the dominant reasons for state mobilizations. Natural disasters accounted for 129 call ups which included 63 floods, 22 snow/ice storms, 12 forest/range fires, 22 tornados, 7 volcanic eruptions, 1 earthquake, and 2 hurricanes. The remaining 372 operations involved 127 medical evacuations, 71 search and rescue missions, 26 water hauls to areas experiencing drought, water contamination or systems under repair, 9 power outages requiring emergency electrical power, 4 chemical spills/chemical fires, and 135 support missions involving sundry emergencies.

Mobilizations for state emergency duty, paid from state funds, provide a return on investment in terms of increasing preparedness for the ARNG's Federal mission. These state call-ups in many ways can be compared to additional periods of training in which ARNG members and units have the opportunity to exercise and perfect their military skills and perform in many of the same functional areas as those required for the Federal mission. Command and control, alert and assembling of units, convoy movement, communication, team work, development of operations orders, logistics and administration are but a few of the functions common to Federal missions which enhance overall preparedness. In addition, during periods of state emergency duty which require specialized units such as medical, transportation, military police, aviation and engineer units, military occupational specialty (MOS) training is enhanced.

FEDERAL MISSIONS

ORGANIZING THE GUARD

The Department of Army (DA) Deputy Chief of Staff for Operations and Plans (DCSOPS) is responsible for determining how the Total Army Force should be organized to meet our nation's wartime requirements. The Chief, National Guard Bureau (NGB) and Director, ARNG, in coordination with state Adjutants General, participate with the DCSOPS in determining what types of units will be organized within the ARNG force structure.

In FY81, Congress supported organizational changes to selected elements of the ARNG force structure to meet Total Army Force requirements and the enhanced defense of our country. Among the most significant was the activation of an additional armor brigade in the Kentucky ARNG . This brigade was formed by a consolidation of existing combat and combat support elements, permitting the Army to add combat power at minimum cost and with minimal personnel turbulence. In addition, nuclear, biological, and chemical defense companies were added to the 50th Armored Division in New Jersey and the 49th Armored Division in Texas. A combat support aviation company was activated in Hawaii as part of the 29th Infantry Brigade, which is roundout to the 25th Division.

The ARNG continued to modernize in FY82 consistent with Total Army Force wartime requirements and resource availability. Significant force structure actions accomplished were the activation of an air traffic control headquarters, a medical battalion headquarters, and an ammunition battalion headquarters with three conventional ammunition companies. Military intelligence aerial surveillance organizations were reorganized to form a Combat Electronic Warfare Intelligence aerial exploitation battalion (-). The ARNG also organized its first units in Guam, a military police company and two engineer detachments.

During FY83, each of the 54 State ARNG headquarters organizations were reorganized into State Area Commands (STARCs). The purpose of the reorganization was to establish more effective support for mobilization of the ARNG. Significant activations in FY83 included an infantry battalion headquarters (mountain) and a mountain school. Establishment of a mountain school fills a void that existed for the training of specialized combat forces. Standardized training by expert mountaineering specialists will ensure that the requisite skills for successful mountain/cold weather combat operations are achieved.

Force structure actions programmed for FY84 include the activation of the 35th Infantry Division (Mechanized) headquarters located at Ft. Leavenworth, Kansas. Plans for the division's structure were solidified during FY83 as a result of conferences with the states involved in formation of this new ARNG division, i.e., Kansas, Nebraska, Kentucky, Colorado, and Missouri. The core of the division will be formed with three existing separate combat brigades from the states of Kansas, Nebraska, and Kentucky. The additional structure will come from the conversion of some existing non-divisional structure and new activations in the five cited states. Activation of the Total Army Force's only ROLAND battalion in the New Mexico ARNG marks the first time that the Guard has received a weapon system not previously fielded by the Active Army. US ROLAND is an all-weather air defense weapon system designed to protect troops and other battlefield targets against low altitude air attack. The ARNG increased its divisional roundout role in the Total Army Force in FY84. An additional roundout brigade was added increasing the total furnished by the ARNG to five and an additional roundout battalion was added increasing the total furnished by the ARNG to seven.

The increase in ARNG force structure planned for FY85 is considerable when compared to previous years. Force structure changes include transfers of Active Component units to the ARNG, activations of new units, and conversions of existing units. Examples of the types of units being transferred and/or activated include engineer, artillery, transportation, forward support, and field service units. A divisional support command headquarters for the 35th Division will be activated. Detailed planning was begun in FY83 for the reorganization of nine state owned/operated training sites which are also mobilization stations. The purpose of the reorganization was to provide continuity in the transition from peacetime to mobilization for those mobilization stations. The Installation Support Units (ISU), as the sites are called, will perform a training mission and a mobilization and deployment planning mission in peacetime. The ISU will operate the mobilization station upon mobilization. The ISUs are programmed to be resourced over several fiscal years beginning in FY85.

The return on investment in the force structure area is realized by summarizing the contributions made by the ARNG to the Total Army Force. Forty six percent of the combat units and 37 percent of the combat support and combat service support forces exist within the structure of the ARNG. As of FY84, these forces include 9 divisions, 17 separate brigades, 5 divisional roundout brigades, 7 divisional roundout battalions, and 4 armored cavalry regiments. Future plans include an even greater role for the ARNG as a partner in the defense of this country.

MANNING THE GUARD

Building on strength gains made each year since 1979, the ARNG has continued to pursue its aggressive program for increasing strength, concurrent with the expansion of ARNG structure. Fiscal Year 1983 closed with an ARNG paid strength of 417,178, including 41,678 officers and 375,500 enlisted personnel. This represented the successful achievement of over 100 percent of ARNG programmed end strength, 97 percent of authorized strength and 92.5 percent of the wartime requirement. At the same time that these gains were being made, the overall quality of the force continued to improve. Test score category IV accessions decreased significantly from 11.8 percent in FY82 to 6 percent in FY83---well within the objective of 20 percent.

Support of our strength program remains key. Strength increases and quality gains are in large measure attributable to the efforts of the ARNG full-time recruiting force. Scheduled additions will bring this force to a strength of 2,534 in FY85. The additional recruiters will be employed to meet a tougher recruiting environment characterized by an improved economic climate and a decreased manpower pool of 18-21 year-olds (9.6 million in 1985 - down from 10.8 million in 1979). The Selective Reserve Incentive Program (SRIP), designed to support quality fill of critical skills and high priority units, will remain an essential ingredient for meeting strength objectives. It is absolutely essential that SRIP be continued beyond the expiration of current authorizing legislation at the end of FY85. The ARNG advertising program further enhances total strength in attracting and maintaining public interest and support. ARNG recruiters continue to benefit from local television and radio public service announcements as well as localization of NGB produced advertisements and media materials. Another success for the ARNG in FY83 was in the retention of enlisted soldiers. Retention of first term enlisted soldiers was 109 percent of objective for FY 83 and 101 percent for careerists. Within that success, however, as the force grew and the economy improved, ARNG losses prior to the completion of enlistment contracts (or non-ETS losses) have started to increase. During FY83, the non-ETS loss rate rose from 15.7 percent to 16.8 percent. The current force of 258 ARNG full-time retention Non-Commissioned Officers (NCOs) is working to improve retention by resolving conflicts with employers and family members and by improving relations with employers; their major thrust, however, is to reinvolve unsatisfactory and absent members. The 99 additional retention NCOs being requested for FY 85 will reduce non-ETS losses to 15.6 percent. Though this reduction in the non-ETS rate appears to be small, it will result in approximately 3,400 current members being retained in the ARNG. This represents an excellent return on investment as 3,400 fewer accessions will be required, resulting in savings of nearly $10.0 million based on an average accession/training cost of $6,700. We expect to meet our retention objectives through the efforts of these retention NCOs and by continuing a strong strength management education and training effort to involve all leaders in the retention program.

The percentage of minorities in the U.S. population is approximately 16 percent with a minority population of 25.6 percent in the 17 to 34 age group. At the end of FY83, minority strength in the ARNG was at 107,099, equating to 25.6

percent of total ARNG strength. This figure includes 3877 minority commissioned and warrant officers and 103,222 enlisted members. The ARNG has experienced a .2 percent drop in minority representation since FY82, although the actual minority strength in numbers has risen by 1491. The percentage drop is attributed to the increase in overall ARNG strength.

Officer programs have continued to contribute quantity and quality to the ARNG strength gains. Accessions have been steadily increasing and have now reached the programmed level, just under that authorized by the force structure. At the end of FY83, commissioned and warrant officer strength reached 41,678 or 99.7 percent of the budgeted program of 41,800, and 97.5 percent of the 42,759 authorized force structure. Although the recruiting and retention of medical specialties, particularly physicians, remains a concern, the fielding of the Army Medical Department full-time recruiting force resulted in a significant increase in accessions- -120 in FY82 and 161 in FY83.

The flow of officers from the Reserve Officers Training Corps (ROTC) has increased from approximately 10 percent of ARNG officer accessions in 1979 to 34 percent in 1983. ROTC accessions are programmed to increase to 40 percent of total accessions by FY89. The State Officer Candidate Schools (OCS) remain the primary source of career officers and best meet the particular needs of geographically dispersed units.

With a good officer strength posture in FY84, the ARNG is focusing on improving the quality of its officer corps. Increased civilian education requirements for officers implemented in FY83 are expected to contribute significantly to this goal in FY84 and beyond. Minimum officer education requirements for OCS applicants will gradually be raised from the current requirement for a high school diploma to two years of college for the 1989-1990 state OCS class. All officers appointed in the ARNG after 30 September 1983 are required to have a baccalaureate degree to be considered for promotion to major. Additionally, all ARNG commissioned officers will be required to have a minimum of two years of college by 1 October 1989. Success of these educational initiatives is dependent upon ARNG efforts to provide tuition and other types of educational assistance to its members similar to that now available for Active Army members. The ARNG and the Army Reserve are seeking authority and funding to begin providing educational assistance to their members in FY85.

The ARNG Captains to Europe program, begun in 1980, has continued to provide an opportunity for ARNG captains to gain experience with the Active Army in Europe while on a 20-30 month tour of active duty. The program has expanded to include Panama and Korea and has provided training for over 117 captains in brigade and smaller units. The Active Component also benefits from this program--one young ARNG captain developed and implemented the M1 tank fielding program for US Army Europe while another developed the USAREUR adopted counter-terrorist program.

Another major element of manning is the full time support force. Traditionally, ARNG military technicians have been the primary source of full time support. For many years, they have provided the continuity for unit operations between monthly drill periods in the administrative, supply, maintenance, and training areas. Prior to the passage of the FY84 DOD Appropriations Act, ARNG military technician program growth had been negligible, increasing from 22,247 in FY81 to 22,742 in FY83. As a result of FY84 Congressional action, the ARNG military technician floor was raised from 22,557 in FY83 to 24,119 in FY84, an increase of 1562 technician positions.

Before FY81, the only ARNG members on active duty tours served in the area of recruiting and retention and in positions at the national level. Based upon the Defense Manpower Commission report of 1976 and Congressional actions in 1979, the ARNG began to add full time military personnel and convert military technician positions to full time military positions. These programs have evolved into today's Active Guard/Reserve (AGR) program. Personnel on full-time military duty in the AGR program generally come from the same source as ARNG technicians, i.e., members of the ARNG who are local residents and who have long term ties with the unit and the community. This is unique to the National Guard as AGR personnel serve in a state control status until federalized.

The Full-Time Manning (FTM) program, which is part of the AGR program, has the following objectives: to provide additional military personnel to assist unit commanders in the transition to a wartime posture by improving training, administration, logistics, and maintenance; to improve readiness capability in early deploying units; and to assist in improving mobilization capabilities at the unit level. The FY80 budget provided authorization and appropriations for 1108 personnel to be placed on full-time military duty in selected units for the purpose of improving mobilization readiness. These 1108 ARNG members were joined by 624 Active Component personnel with highly specialized skills to assist in accomplishing this mission. Through FY84, the FTM program has grown to a level of 6,253 ARNG AGR personnel and 839 Active Component personnel.

The FY 84 appropriation includes a total of 16,632 AGR personnel. The FY 85 budget request includes growth of 9,951 personnel in the AGR program to 26,583 and will improve our ability to achieve ARNG readiness objectives. Approximately 94 percent of the growth is in the FTM program (3,588) and in the Readiness Support program (5765). Six hundred of the AGR-FTM positions will replace Active Component FTM personnel as they are phased out of the FTM program and return to Active Component units. The balance of AGR-FTM growth (2988) will provide additional personnel for company-size units and intermediate staff and will be assigned in sequence based on priority. The increase in the Readiness Support program provides for a wide variety of initiatives. These include, but are not limited to, programs to develop new organizational structures while modernizing forces, identifying and establishing aviation training sites, improving personnel support, and identifying the initial increment of full-time unit support considered necessary to adequately support the ARNG. This number is considered the minimum necessary to support the FY85 requested force of 447,283 soldiers and associated equipment that will comprise 57 percent of the Active Component strength and 39 percent of the Total Army Force inventory of artillery, combat vehicles, and other major items of equipment.

EQUIPPING AND SUSTAINING THE GUARD

Elimination of the ARNG equipment shortfall would provide the most immediate return on investment, in terms of readiness improvements, from resources applied toward a major problem area in the ARNG. Lack of equipment on hand and maintainability problems associated with older equipment currently found in the ARNG inventory are the two primary reasons for readiness shortfalls. Equipment shortages are by no means unique to the ARNG. They exist throughout the Total Army Force and occur as a result of operating in a resource constrained environment. At the start of FY84, equipment needed by the ARNG to meet full wartime mobilization requirements was valued at $25.0 billion (includes procurement funded items only). To meet this wartime requirement, equipment valued at $13.1 billion was on hand in ARNG units leaving a shortfall of $11.9 billion. These figures are substantially larger than the $4.7 billion shortfall figure reported to Congress at the start of FY83. The increase in cost figures reflects a more realistic picture and results from costing the inventory and shortfall based on modern equipment replacement costs and current dollar pricing. The $4.7 billion figure was based, for example, on the procurement cost for M48A5 tanks in units which had that model of tank and were short the number required by the unit TOE. That shortfall is now based upon the cost of filling the requirement with an M1 Abrams tank.

The Active Component is committed to providing modern equipment to ARNG units in support of both peacetime training and wartime requirements. Evidence of this commitment is reflected by the decision to provide modern equipment to ARNG roundout units concurrently with modernization of the parent Active Component unit. This has accelerated and is scheduled to accelerate the modernization process in many ARNG roundout units. Examples of modern equipment which have been issued since FY82 are M1 Abrams and M60A3 tanks, Bradley Fighting Vehicles, and Improved TOW vehicles. Receipt of this new equipment causes the displacement of equipment currently on hand to other lower priority units, either to fill unit shortages or provide a more modern set of equipment. An example of this "waterfall effect" becomes evident when the M1 tank displaces the M60, the distribution of which will then cause M48A5 tanks to displace.

In FY83, equipment issued by the Active Component to the ARNG through normal supply channels in FY83 totaled $370 million, an increase of nearly $100 million over the FY82 level of $271 million. Projections by DA indicate that $611 million worth of equipment will be delivered to the ARNG in FY84. The Active Component is committed to procure nearly $1 billion worth of equipment for the ARNG as a result of FY84 appropriations. Significant deliveries of this equipment are scheduled to occur in the FY86-87 time frame.

Because of the high density of armor within Warsaw Pact forces, it is imperative that we have weapon systems capable of defeating that threat. Modernization of the ARNG helicopter fleet began in FY80 with the transfer of the first 7 AH-1S aircraft from the Active Component. Anticipated deliveries of 27 AH-1Ss in FY84 and 67 more in FY85 will increase the ARNG inventory to a total of 150 AH-1Ss. Total ARNG requirements are for 409 AH-1S aircraft. Most ARNG aviation attack units are currently equipped with the UH-1M aircraft, a Vietnam vintage attack helicopter which has neither the armor defeating TOW system nor an all weather capability. Delivery of AH-1S aircraft has provided ARNG aviation with both capabilities.

Additional equipment has also been procured for ARNG units from Congressionally dedicated funding. As a result of dedicated funding provided in 1978, the ARNG has received newer generation communications equipment. Also, 149 5 ton cargo trucks were distributed to the ARNG as a direct result of 1982 dedicated funding. Congressionally dedicated funds were utilized in FY83 for procurement of armored personnel carriers, 5 ton cargo trucks, and tactical communications equipment. In FY83 Congress also provided funds for procurement of COBRA helicopters and C-12 aircraft for the ARNG within DA procurement appropriations. The ARNG will use the $100 million of dedicated procurement funds provided by Congress in FY84 for procurement of tactical communications equipment, fuel tankers, Commercial Utility Cargo Vehicles, night vision goggles, and Decentralized Automated Service Support System (DAS3) computers. This is in addition to $45.8 million for upgrade of AH1G helicopters to AH1S configuration (COBRA/TOW) and $10.5 million for 23 company sets of Multiple Integrated Laser Engagement Systems (MILES) provided within DA procurement appropriations and specifically designated for the ARNG. The delivery of this equipment has already improved, and, in the cases of equipment which has not yet been delivered, will improve the equipment on hand status of early deploying units. Additionally, delivery of modern equipment to the ARNG provides a training opportunity that will enhance the effectiveness of the ARNG's role as part of the Total Army Force. Provision of new equipment to the ARNG will also ensure compatibility with Active Component equipment.

As a result of an ARNG Communications-Electronics Equipment Study conducted in 1982, the problems identified in the areas of interoperability, compatibility, supportability, and deployability have been and are still being addressed at the DA level. Major concerns are with the first generation multichannel Frequency Division Multiplex equipment in all ARNG signal battalions and detachments. DA has directed assessments of the interoperability, supportability, and interface of the first generation multichannel equipment by all major commands.

With $70.6 million of the total of $150 million of Congressionally dedicated procurement funds provided by Congress in FY83 and FY84, the ARNG has been able to initiate procurement of equipment to improve division and corps level communications equipment. Examples of this equipment would be multichannel telephone terminals and radios for corps level signal units, and improved high frequency radios for division level units. In addition, the ARNG is also procuring small unit transceivers and test equipment. This Congressionally dedicated funding is enhancing the ARNG readiness capability and will improve battlefield communications with Active Component units.

The ARNG organizational clothing and equipment (OCE) program posture has improved but continues as a major problem area. The problems are related to expanding requirements for stock funded items due to the increasing size of the force, new systems being introduced (e.g., body armor, Kevlar helmet, chemical protective overgarment), new requirements (e.g., troops in units located in warm climates being required to be outfitted for cold weather missions), increased emphasis (e.g., one training set of chemical defense equipment (CDE) in addition to one contingency set), the age of on hand OCE, and inflation. Prior to FY82, there was no significant growth in the ARNG OCE program. In FY82 and FY83, Congress provided increases to the Operation and Maintenance, ARNG (OMNG) budget request which permitted significant increases for procurement of CDE, cold weather clothing and equipment (CWCE), camouflage modules, OMNG funded medical equipment, tool and test sets, and fire direction sets.

The level of support available to requisition from DA and DOD stock funds is critical to unit mobilization and deployment readiness. Even with the increases provided by Congress in FY 82 and FY83, ARNG OCE shortages totaled $444.1 million at the end of FY83. Negative program growth of $64 million in FY84 in this critical area will cause the projected backlog to increase to over $508.2 million at the end of FY84. The FY85 budget of $126.5 million will not alleviate the shortfall significantly because, even with increased program growth over FY84 levels, replacement of demand supported items consumed during FY85 will exceed $100 million. Chemical Defense Equipment shortfalls which impact on both training and mobilization readiness continue to be of concern. Extensive shortages of OMNG funded medical equipment also impact on the ARNG's ability to achieve readiness goals. Based on increasing OCE requirements, it is difficult to project significant reductions in backlogs in the near future. Priority of issue continues to be to early deploying units.

Expansion of commercial communications services for the ARNG will continue during FY 84 and 85 to support DoD requirements for Intrusion Detection Systems for facilities housing sensitive equipment as well as to support budgeted increases in communications services required for added full time support personnel. Replacement of antiquated and inefficient telephone systems at State headquarters remains a high priority. Planning and programming to accomplish these actions did not include cost inflation resulting from the uncertain impact of telephone industry deregulation. The impact of this deregulation, based on telephone cost increases that have been publicly revealed, will be substantial and will require additional resources to support basic telephone service and commercial circuits. By January 1985, all states will have the capability to pass classified data through secure facilities and communications equipment. In conjunction with Forces Command (FORSCOM), planning continues to provide secure terminals at each State Area Command (STARC) by FY86 to provide access to the World Wide Military Command and Control System.

Materiel readiness reports at the end of FY83 revealed that the ARNG equipment readiness posture compared favorably with Army standards. However, some disturbing trends in non-mission capable rates for the ARNG have developed. A contributing factor to these trends is the shortfall in the FY84 funds needed to purchase repair parts. Shortfall in the ARNG repair parts funding program will exceed $138 million by the end of FY84. This shortfall will force a reduction in the stockage of authorized repair parts, resulting in a reduced capability to provide responsive repair parts support and decreased equipment operational readiness. Repair parts requirements are directly related to expanded equipment inventories, equipment age, and to equipment deterioration resulting from the increased use of ARNG equipment to support training. The expanded use of ARNG equipment to support Active Component and Army Reserve year round training programs is also a contributing factor to the significantly increased ARNG maintenance support requirements. While most of the equipment in the ARNG is fully supportable and deployable, some of it is old and significantly less capable than equipment in the Active Army. For example, ARNG air defense units are equipped with the 30 year old M42A1 Self Propelled 40mm Gun - Duster, which has become progressively more difficult to maintain due to age, deterioration and the non-availability of repair parts, major components and ammunition.

The budgeted FY85 repair parts funding support level will provide a positive improvement in the ARNG materiel readiness posture and deployment capability. This increase will provide for improved repair parts stockage and significantly decrease repair parts related maintenance backlogs at both organizational and support level maintenance shops. Increased command emphasis, the implementation of management initiatives designed to improve both maintenance training and operation, and the expanded availability of repair parts will significantly enhance the ARNG's FY85 equipment operational readiness posture.

The FY85 depot maintenance program provides $81.4 million to upgrade and improve aging ARNG equipment. A series of depot maintenance programs designed to improve the fighting capability of combat vehicles is continued in FY85. These essential equipment improvement programs include modernization of the M109A3 155mm Self Propelled Howitzer, conversion of gasoline powered M113 Armored Personnel Carriers to diesel engines, and upgrade of the ARNG 5 ton wrecker fleet. A program to combat the very serious problem of rust damage to ARNG vehicles is being continued. This rust proofing program, initiated in FY83, will ultimately result in the rustproofing of all tactical wheeled vehicles in the ARNG inventory. The FY85 ARNG depot maintenance program provides funds to support a materiel readiness posture in the ARNG that will continue to compare favorably with established standards.

Upon mobilization, the four ARNG Aviation Classification Repair Activity Depots (AVCRAD) round out the Active Component's world-wide aviation depot maintenance capability. This program transfers the experience and expertise of ARNG aviation maintenance personnel to the sustainment of Total Army Force aviation immediately after mobilization. In their pre-mobilization status, the mission of these units is to provide aviation maintenance support up to and including limited depot maintenance for the 2500 aircraft in the ARNG inventory. One of the programs in this support mission is a closed loop, aircraft component direct exchange program. Serviceable components are stocked at the AVCRADs. Unserviceable components are sent from units to their supporting AVCRAD, which returns a replacement component to the unit. AVCRADs perform the required repairs on the unserviceable components and replace them in stock, ready for reissue. During FY83, 9,387 components were exchanged, which directly contributed to the ARNG aircraft operational readiness rate of 73%.

The demand for ARNG personnel and administrative management information required to better manage the ARNG continues to expand. The existing automated ARNG Personnel Reporting System (PRS) can no longer keep up with these fast growing requirements. The ARNG Standard Installation/Division Personnel System (SIDPERS) is designed to fill this void. The SIDPERS-ARNG system will provide standardized data which will permit interface with Active Army and Army Reserve automated management information systems. This standardization will greatly broaden the management information available to support rapid mobilization, force structure objectives, maintenance of and projections for manning the ARNG, statistical input for logistical funding and readiness, and provide the operations and training information required to meet mission requirements. Implementation of ARNG-SIDPERS will provide the capability to immediately merge ARNG personnel records and data into the Total Army Force personnel management system upon mobilization. It also will enhance retention through provision of improvements in the military pay system
for individual soldiers. Although the SIDPERS-ARNG system will not be operational until October 1984, preparations for its implementation have produced some immediate returns. The SIDPERS personnel in the states are responsible for the PRS, a quality assurance program, records preparation, and certain data elements in the current automated system. This has improved the quality of data now received through the PRS. The placement of SIDPERS personnel assets in the states to effect the quality assurance program, establish document audit trails, and train input originators and personnel managers has also resulted in a more timely and accurate drill attendance reporting program. SIDPERS personnel will continue preparations for system implementation while providing the management information required to support the Guard's role in our national defense.

Another sustaining effort is that of operating, maintaining, modernizing, or replacing facilities utilized by the ARNG. This involves a physical plant of 5,010 facilities consisting of 2,822 armories (1,504 of which are over 25 years old), 1,585 logistics facilities, 445 training sites, and 158 United States Property & Fiscal offices and warehouses. These facilities range in size from a 60-person armory in a small community to large training sites with acreage capable of supporting an entire division during a single training period. Under the provisions of the United States Code, facility support varies from 100 percent Federal funding of training sites to full state funding for operation and maintenance of state-owned armories. The Backlog of Maintenance and Repair (BMAR) will continue to increase, based on funds available for the Base Operations program during FY 84. However, the FY 85 budget request includes funds for BMAR reduction which, when coupled with the out years program, would meet the Congressionally mandated containment level of $15.2 million during FY 88. Continuing use of computerized systems is paying big dividends in upgrading the OMNG minor construction and maintenance and repair programs and making them more responsive to Federal and state requirements.

The backlog in construction requirements at the end of FY 83 is valued at $825 million which indicates a leveling off of identified construction backlog. However, this apparent leveling off is deceptive considering the increased aging of the existing physical plant, as noted by the increase in the number of armories over 25 years old and current emphasis to replace World War II temporary buildings still in use at annual training sites. New management initiatives are addressing these problems. The objective of one such initiative entitled Stable Annual Investment for Renewal of Systems (STAIRS) provides new perspectives in assessing priorities during budget cycles as one means of gaining visibility for these needed facilities replacement projects. The program goal is to achieve a 2 percent replacement rate for all categories of facilities. Emphasis is being given minor construction projects to upgrade and modernize training site facilities and ranges as one means to maximize training during the limited time available to ARNG troops. Range developments will be consistent with new weapons entering the ARNG inventory and the Army's combat training doctrine.

The FY 84 Military Construction, Army National Guard (MCNG) program provides for 53 new major construction projects. The minor construction program includes funds to initiate the local training site range modernization program. The FY85 military construction request of $89 million will provide for 50 major construction projects, with 8 additional construction projects released from the major construction program to be accomplished under the expanded authority permitted under Military Construction (MILCON) minor construction. Funds programed for upgrading local training sites have been doubled from the prior year amount.

TRAINING THE GUARD

As a result of increased reliance on the ARNG as part of the Total Army Force, major emphasis continues to be placed on training to meet readiness goals, both for individuals and units. Return on investment from resources applied to training is a force that knows how to fight and win on the modern battlefield under the lethal conditions which will exist there. Much has been accomplished in improving the training readiness of the ARNG in the past few years but with the increasingly important role it is being asked to play in the Total Army Force, much remains to be done.

Increased emphasis has been focused on training in a field environment in the past few years. We must train in an environment which provides as close to combat conditions as possible and to the levels which combat will demand, i.e., train as we will fight. Our leaders have to know how to orchestrate the battlefield to our maximum advantage because we will be outnumbered both in personnel and weapon systems. Because there will be little time for post-mobilization training, we must be prepared to respond at any time.

An established goal of the ARNG is to increase the level of unit training. During FY83, 57 percent of all armor, infantry, armored cavalry, reconnaissance and TOW Light Anti-Tank (TLAT) battalions/squadrons trained at battalion level and above. All units must graduate to combined arms (task force and company/team level) training as this is the way these units will be required to fight. The ARNG has made some progress in this vein with National Training Center (NTC) rotations for heavy roundout battalions, limited procurement of MILES equipment, and three week annual training periods for selected units. However, in order for us to improve combined arms training, which takes place primarily during annual training, we must improve our capability to conduct mission-oriented training during drill periods. Factors inhibiting that capability are support for local training areas and a shortage of travel funds to support movement of units to adequate training areas.

In FY83, ARNG units began training at the NTC when an armor battalion from the Georgia ARNG trained there with the Active Component brigade with which it is aligned. In FY84, a mechanized infantry battalion from the Minnesota ARNG will be challenged by the NTC training experience. In FY85, five ARNG battalions are scheduled to participate. Heavy roundout battalions will continue to train there on a frequency of every three years and scheduling of an ARNG brigade task force is being considered for the FY86-87 timeframe. This program is funded almost entirely by FORSCOM for ARNG units. Support of FORSCOM funding programs for the NTC is, therefore, vital to the ARNG. Funding for an additional week of annual training and preparatory training for participating units is included in the FY85 ARNG budget request. Training for ARNG units at the NTC provides invaluable lessons learned and a unique opportunity to realistically execute missions for which they have trained.

A requirement for Reserve Component nuclear-capable artillery battalions to take a nuclear ARTEP and have a technical validation inspection administered was implemented in FY83. In order to successfully complete a qualification ARTEP, a unit must conduct a minimum of 80 percent of their delivery of fire tasks while maintaining a 70 percent or better operational readiness in personnel and equipment. Each nuclear capable unit must complete all nuclear level tasks. During the 50 continuous hours of field operations required, a unit must conduct a minimum of five tactical moves of at least 5 kilometers each. Two of these moves must be conducted at night. Twenty-five ARNG battalions were evaluated and the results were impressive. With a standard of 80 percent, the ARNG artillery battalions averaged 95.6 percent. Two units had perfect scores and only two scored below 90 percent. The remainder of the ARNG nuclear-capable artillery battalions will be administered this evaluation, required every three years, during FY84 and FY85.

The AC/RC Partnership Program pairs the major combat units of the ARNG with similar Active Component units for training support, evaluation, and assistance. This program was initially funded in FY82 and has expanded to a $2.9 million program for FY85. It provides vital training assistance to ARNG combat units which comprise almost half of the wartime fighting strength of the Total Army Force. Another key result of this program has been support for the ARNG force modernization process.

The Army CAPSTONE program aligns Active Component and Reserve Component units based on wartime requirements and allows units to plan and train for their wartime mission during peacetime. The initial CAPSTONE alignments were developed for Europe and have subsequently been expanded to include the Pacific and the rapid deployment force (RDF). As relationships have solidified, senior CAPSTONE headquarters are providing subordinate units mission planning and training guidance. The FY85 budget provides funding to support attendance by ARNG commanders at conferences with CAPSTONE aligned units to exchange information and refine operation plans.

ARNG participation in exercises serves as a prime means of accomplishing much needed combined arms training and exercising mobilization plans and provides units with training opportunities that are not normally available in the yearly training program. ARNG units are selected to participate based upon their contingency mission (CAPSTONE alignment). Greater emphasis is being placed upon ARNG unit participation to fully evaluate a given operation plan. Involvement in exercises has increased dramatically since FY81 when 68 units and unit cells participated. During FY83, 185 units and unit cells participated in exercises to include deployment of a battalion task force with its equipment to Italy for Display Determination 83. In addition, the ARNG deployed a complete armor battalion to Europe which drew POMCUS equipment and participated in REFORGER 83. Plans have not yet been finalized regarding ARNG exercise participation in FY84 and FY85, but more units and unit cells will likely be involved than in previous years.

Overseas deployment training (ODT) provides high priority ARNG units the opportunity to train in their contingency area with their wartime gaining command. The current ODT program began in 1976 with six ARNG units participating. Participation increased to 221 units and unit cells in FY83 with a further increase to 407 units and unit cells in FY84 and 483 units and unit cells in FY85.

Since 1981, the Battalion Training Management System (BTMS) has been in a sustainment mode, ensuring institutionalizaton of training management in all aspects of the Total Army Force training system. The BTMS goal is to ensure that all organizational levels, from squad to battalion, are trained to effectively plan, conduct and manage new training to include the understanding and use of training support materials. The Army's training management doctrine has been incorporated into all levels of the ARNG school system. An analysis provided by FORSCOM based on data contained in the annual training (AT) evaluation reports of Reserve Component units reported a positive correlation between BTMS and "overall AT performance" for company-sized units, underscoring the value of BTMS in developing junior leaders. Statistically, BTMS was the most significant factor influencing overall AT performance. Units which scored well in BTMS performed well overall.

The ARNG has embarked on a program that will improve the educational qualification of the AGR force and the M-Day force. To assist in attaining the required training standards, all AGR officers and NCOs are to receive resident training at Active Component schools. The intent is to have ARNG AGR personnel trained to the very highest level possible. By receiving the very best training available, these ARNG trainers will be better able to assist unit commanders with training of the M-Day force and to make optimal use of the limited training time available. M-Day personnel are also encouraged to attend Active Component schools to improve their military skills when attendance at such schools can be worked out with employers. Side benefits of such training sometimes result in improved ability to perform in their civilian jobs as well.

Conduct of training for NCOs in the ARNG today is designed to provide the NCO with the knowledge and skills necessary to lead, fight, and survive on the modern battlefield. The key to battlefield mission success rests heavily on a well trained NCO force. The training benefits realized are that all phases of readiness, including training, mobilization and capability to defeat threat forces will be enhanced when leadership skills are improved at all levels of supervision. In 1977, the ARNG instituted an NCO education system. In FY80, a formalized NCO training program approved by Training and Doctrine Command, the Reserve Component Noncommissioned Officer Education System (RCNCOES), was begun, graduating 7,000 students from courses designed for all NCO levels. Participation in RCNCOES programs has increased to the point that 30,000 students are expected to graduate in FY85 with $13.0 million budgeted for the program. Commanders and senior NCOs have stated that significant contributions have been made to the ARNG overall readiness posture as a result of RCNCOES programs.

Initiated in FY81 as a $3.0 million program, the Key Personnel Upgrade Program (KPUP) is budgeted for $13.3 million in FY85. The purpose of KPUP is to further develop key personnel in ARNG units through direct association with their Active Component counterparts during tactical training exercises. Initially participation in KPUP was restricted to personnel in selected units but in FY82, participation was opened to personnel from all ARNG units. During FY83, ARNG personnel participated for the first time in REFORGER 83 with Active Component units currently deployed in Europe and also participated in tactical training at the NTC. These and other on-going KPUP initiatives will further increase the utility of this program which has become vital to the training readiness of the ARNG.

The Army's Individual Training and Evaluation Program (ITEP) was implemented Army-wide in FY83 as a successor to the Skill Qualification Training (SQT) program. While offering many refinements, a key feature is that it is a program which can be fully executed. Initially funded in FY82, ITEP has not expanded significantly due to many changes. Management improvements and the advent of ITEP, however, are expected to generate full participation. ITEP will be a key feature in the ARNG program to increase MOS qualification.

Training ammunition authorizations in FY84 for the ARNG are 76 percent of requirements ($167 million), a 24 percent increase over the FY83 requirements level. Increases in training unique and pyrotechnic munitions will afford ARNG commanders opportunities to plan for and execute training programs so readiness may be improved. Training with MILES is now being supported at a limited level due to the constrained authorizations of blanks and simulators. Large caliber high cost munitions continue to be authorized at minimum levels which constrain or preclude reprogramming of training not accomplished to standards. This restricts a commander's capability to effect performance oriented training and BTMS techniques.

The availability and effective use of training devices continues to be extremely critical to the ARNG. With limited training time and limited access to optimal training sites, use of training devices and simulators is essential for the attainment and sustainment of individual/unit proficiency at the unit armory. As a result of emergent technology, future training devices may be utilized in lieu of high cost munitions. The initial cost of training devices will be high but long term benefits over will far outweigh those initial outlays. Procurement of MILES equipment for the ARNG in FY84 will have a positive impact on training. However, limited resources exist to address ARNG requirements and shortfalls remain.

The modern weapons coming into the Army inventory are far superior in distance, accuracy, and destructive power compared to the weapons being replaced. Modernization of ARNG local training areas and ranges needs to be accelerated to keep pace with distribution of modern high technology weapon systems to the ARNG. Ranges need to be enlarged and designed for multiple purpose use to accommodate introduction of sophisticated training devices such as lasers, simulators and modern target systems. Additional resources are required to support improvements in training sites and ranges if ARNG units are to meet critical training requirements for pre-mobilization as well as post-mobilization.

Over 30 percent of the Total Army Force's combat aviation assets exist in the ARNG. ARNG aviators are required to meet the same minimum annual flying requirements and standards as their active counterparts. The challenge to ARNG aviation in the 1980s is to meet the individual and crew requirements identified by the Aircrew Training Program and also to train as an element of the combined arms team. To help alleviate this increased training workload and allow aviation units to concentrate on unit and combined arms training, an ARNG Aviation Training Site (AATS) Program was developed. The program was designed to complement current aviation training efforts. The Eastern AATS (EAATS), the first of two AATS, became fully operational during FY83. Its mission is to conduct ARNG individual aviation qualification training not provided by the US Army Aviation Center, but essential to the readiness of ARNG units. The EAATS program will provide post graduate flight training for over 500 aviators per year. The Western AATS is scheduled to be operational during FY87 with its primary mission of supplementing unit tactical training requirements with emphasis on aerial gunnery and attack team training.

The ARNG has experienced an increase in Undergraduate Pilot Training (UPT) quotas from 140 in FY82 to 224 in FY83. The ARNG utilized all UPT quotas during FY83. These quotas will increase during the 1980s and will eventually provide an output of 250 ARNG aviators year per by FY89. The ARNG has seen positive results over the past 2 years since imposing a restriction of 27 1/2 years of age to apply for Initial Entry Flight School. The tradeoff for our highly experienced force of aviators is its steadily increasing average age. The ARNG UPT program is solving the "Aging Aviator" problem and establishes a 20 year life-cycle aviator management program.

In support of vigorous training programs, the ARNG safety/accident prevention efforts are targeted toward the prevention of motor vehicle accidents and personal injuries. Special emphasis countermeasure programs during FY83 impacted on the reduction of both motor vehicle and training accidents. The ARNG motor vehicle accident rate was 2.03 accidents per million miles driven, down from 4.6 in FY82. The FY83 overall accident rate was 1.76 accidents per 200,000 hours of personnel exposure, down from the FY82 rate of 4.2.

The ARNG aviation accident rate in FY83 was 2.00 accidents per 100,000 flying hours, an increase from the FY82 rate of 1.01 which is the lowest rate ever achieved in the ARNG. The FY83 rate compares favorably with a 2.50 aviation rate Army-wide. Aviation safety awareness through better communication with field organizations became a primary goal in FY83. An analysis of the accident experience indicates that human error ranks as the number one factor. To reduce the accident rate, formal safety training and education were emphasized. To fill an obvious void in the safety training system, the ARNG Aviation Mishap Prevention Orientation Course (AMPOC) was developed and taught twice during FY83. AMPOC coupled with an intensive management of available quotas from other sources has paid big dividends in aviation safety awareness. To complement increased awareness, the Regional Accident Prevention Survey Program (RAPS) was totally implemented in FY83. RAPS is a self-help type program to accomplish annual accident prevention surveys of all ARNG aviation facilities. The program creates a network of survey teams that use an ARNG-developed checklist to inspect aviation facilities. All facilities successfully participated in RAPS during FY83.

The National Guard Professional Education Center (PEC) conducted its first course in April, 1975. The purposes of the school are to provide uniform, centralized training for full-time support personnel as it relates to ARNG programs and to increase the capability of those individuals to perform their jobs on a day-to-day basis. Since PEC was established, over 33,000 students have graduated from the school. Among the training offered at PEC are courses for Unit Administrators, Administrative Officers, Operations and Training Readiness Specialists, and Training NCOs. These courses are taught with emphasis on ARNG unique operations, are unavailable anywhere else in the military training arena, provide specialized and very cost effective training, and increase mobilization readiness for the ARNG.

READYING/MOBILIZING THE GUARD

Since FY81, through the first quarter of FY84, ARNG reporting units have increased their combat readiness by 6 percent in training readiness, 2 percent in MOS qualification readiness, and 5 percent in personnel readiness, while equipment on hand readiness was decreasing by 5 percent. To reiterate the problem with regard to equipment, it is not unique to the ARNG but is a basic problem throughout the Total Army Force. In spite of the decrease in equipment on hand readiness, for the third consecutive year, the ARNG has maintained an overall combat readiness rate of over 60 percent for all its reporting units. This accomplishment was achieved during a period of change which uniquely challenged our ability to continue maintaining appropriate force readiness levels. As the Active Army organizes its forces to meet the many worldwide contingencies, the role of the ARNG has increased. More units are being assigned high priority missions and, in some cases, are assigned the requirement to respond to more than one contingency mission. To illustrate the increasingly important role the ARNG has assumed, since FY81 ARNG missions have changed as follows: Intensive Management Force (IMF) units increased from 497 to 1190; units assigned to the RDF have increased five times; Prepositioning of Materiel Configured to Unit Sets (POMCUS) units decreased from 21 to 12 although POMCUS Back-up Forces increased from 6 to 26; Quick Fix Force units increased from 105 to 152; and D to D+30 units increased from 119 to 210. As the review of Active Component missions which could be transferred to the ARNG continues and worldwide contingency needs increase, it can only be assumed that the ARNG's role in the assumption of high priority missions will expand.

The ARNG conducts mobilization exercises to evaluate the ability of units to meet their deployment objectives. Evaluations were conducted for 46 percent of the units selected for ODT in FY82. In FY84 the goal is 100 percent. That goal should be achievable and has been reestablished for FY85. In FY82, a program was begun to evaluate all IMF units over a five year period and every three years thereafter. While several DA actions caused the IMF to expand , the program is on target. Approximately 250 exercises were conducted in FY83 with a budget of $9.0 million. In FY84 over 300 exercises will be conducted and over 350 exercises are planned for FY85 at a cost of $10.7 million. These exercises focus on the immediate postmobilization tasks to be accomplished by ARNG units and STARCs. In

FY85, 54 STARCs and over 80 percent of ARNG units will participate in a worldwide Joint Chiefs of Staff mobilization exercise. This exercise will provide the opportunity to examine further the mobilization preparedness of the ARNG and, more specifically, the effectiveness of the ARNG exercise program. Although the current program is considered a success, funding is available only for early deploying units. Resources are not provided for evaluating over 60 percent of the ARNG combat divisions, 50 percent of the separate brigades, and 100 percent of the armored cavalry regiments.

Several mobilization initiatives were begun by states during FY83 which have nationwide implications. One of these involved a mobilization exercise which included the rail movement of 145 M48A5 and M60 tanks. The exercise which was planned and conducted by the Nebraska STARC involved complex coordination between several government agencies including DoD, Military Traffic Management Command, and Anniston Army Depot. This unique approach provided vital training for ARNG members and staffs and resulted in a savings of approximately $400,000 over conventional methods.

SUMMARY

The unstable situation that exists in the world today requires that the ARNG be ready for mobilization at any time. When called upon by the American people to assist in the defense of this country, there will be little time available for training and equipping the force. We have made progress in the past few years and are determined to do our jobs better. We appreciate the effort and concern of Congress in providing the support required by the ARNG to accomplish its mission. Ours is a mutual task.

ARMY NATIONAL GUARD BUDGET

NATIONAL GUARD PERSONNEL, ARMY

The FY 85 National Guard Personnel, Army (NGPA) budget request of $3,075 million provides pay and related expenses for Army National Guard personnel. Table 1 shows Army National Guard personnel strengths. Table 2 shows the NGPA budget categories. The FY 85 request supports a 447,283 personnel end strength or a 3.3% increase over FY 84. Funding includes a recruiting objective of 63,000 Non-Prior Service (NPS) personnel for initial active duty training and 47,000 Prior Service (PS) personnel for a total recruiting objective of 110,000 accessions in FY 85. The full time Active Guard/Reserve (AGR) support force increases to 26,583 (9,951 over FY 84). Funding for National Guard personnel supports increases in Schools and Special Training ($31 million), AGR support ($194 million), extra week of annual training, additional training assemblies and an increase in strength of Pay Group A/P ($50 million). The Incentive Program, which provides enlistment and reenlistment bonuses and educational assistance, amounts to $59 million. Pay Group F, which provides for initial active duty training, is increased by $33 million to provide costs associated with training NPS accessions. The FY 85 request includes $828 million for ARNG retired pay accrual.

TABLE 1

US Army National Guard
(End Strength)

	FY 83 ACTUAL	FY 84 ESTIMATE	FY 85 REQUEST
Pay Group A	377,486	386,315	389,773
Pay Group F	15,515	19,617	20,491
Pay Group P	10,420	10,436	10,436
Full-Time Active Duty	13,757	16,632	26,583
Total	417,178	433,000	447,283

TABLE 2

National Guard Personnel, Army
($ in Millions)

	FY 83 ACTUAL	FY 84 ESTIMATE	FY 85 REQUEST
Pay Group A/P	996	1,070	1,599
Pay Group F	189	217	326
School Training	69	94	138
Special Training	58	80	122
Administration/Support	361	472	890
Total Program	1,673	1,933	3,075
Retired Pay Accrual	-	-	- 828
Total Excluding Retired Pay Accrual	1,673	1,933	2,247

OPERATION AND MAINTENANCE, ARMY NATIONAL GUARD

The funding categories of the FY 85 Operation and Maintenance, Army National Guard (OMNG) appropriation are shown in Table 3. Real growth in FY 85 is approximately 14 percent and occurs as a result of programed force structure modernization, increased support for modernized systems (87) added to the ARNG equipment inventory since FY 83, and readiness improvements. In addition, this appropriation supports a technician and civilian end strength of 24,563 at a cost of $675.9 million, which accounts for 48 percent of the total appropriation request.

TABLE 3

Operation and Maintenance, Army National Guard
($ in Millions)

	FY 83 ACTUAL	FY 84 ESTIMATE	FY 85 REQUEST
Training Operations	152	154	160
Logistical Support	797	775	911
Base Operations	94	93	122
Depot Maintenance	56	54	82
Headquarters and Command Support	58	74	88
Recruiting	22	27	29
Medical Support	8	10	13
Total Program	1,187	1,187	1,405

MILITARY CONSTRUCTION, ARMY NATIONAL GUARD

The FY 85 request for Military Construction, Army National Guard provides for 50 major projects. Included in the major projects are 27 armories, 6 aviation facilities, 4 training facilities, 9 equipment maintenance facilities, 3 U. S. property and fiscal office facilities, and one land acquisition. Table 4 displays the MCNG appropriation by major category.

TABLE 4

Military Construction, Army National Guard
($ in Millions)

	FY 83 ACTUAL	FY 84 ESTIMATE	FY 85 REQUEST
Armory	23	28	28
Non-Armory	21	29	33
Minor Construction	8	8	19
Planning and Design	3	3	9
Total Program	55	68	89

BRIGADIER GENERAL RICHARD D. DEAN
DEPUTY DIRECTOR, ARMY NATIONAL GUARD

General Dean began his military career with the Missouri Army National Guard in July 1948 serving as an enlisted member of the 175th Military Police Battalion until he entered the Army ROTC program at the University of Missouri. Completing the senior phase of ROTC in 1952, he was appointed a second lieutenant, Field Artillery, Officers Reserve Corps, on 5 June 1952.

Ordered to active duty on 7 July 1952, he served as a Company Officer, Fort Riley, Kansas from July 1952 to June 1953. General Dean was assigned to Battery C, 160th Field Artillery, 45th Infantry Division Artillery and served as a Forward Observer and Assistant Troop Information and Education Officer in Korea from August 1953 until March 1954.

Upon release from active duty, he returned to the Missouri Guard as a first lieutenant and was assigned as Executive Officer, Battery C, 1/128th Field Artillery on 22 June 1954. He commanded the Battery from February 1956 until April 1959 except when assigned as Battalion Liaison Officer from December 1957 to May 1958. He then commanded the Headquarters Battery, 2/128th Field Artillery until January 1960 when he was reassigned to the Battalion staff and then as the Battalion Executive Officer in June 1962. In April 1963, he was assigned to the 135th Artillery Group as Communications Officer until December 1963 when he was reassigned as Executive Officer, 1/128th Field Artillery and was selected in October 1970 to command the Battalion. General Dean served as Executive Officer, 135th Field Artillery Group from May 1973 until his selection to command that unit in January 1975.

While attending the Regular Course at the National War College from August 1978 to June 1979, General Dean was selected as Commander, 35th Engineer Brigade on 2 June 1979, making him the first officer to command two of the Missouri Army National Guard's three major headquarters. He was federally recognized as a brigadier general of the line on 2 June 1979. On 4 October 1982, he was appointed as the Deputy Director, Army National Guard.

General Dean has been awarded the Meritorious Service Medal with one Oak Leaf Cluster, Army Commendation Medal, National Defense Service Medal, Korean Service Medal with Service Star and numerous other decorations.

GENERAL QUESTIONING

Senator **STEVENS**. You start, and then I will ask my questions.

Senator **RUDMAN**. Thank you very much, Mr. Chairman. I really only have two areas of questions at this time.

FULLTIME MANNING

There is a substantial disagreement going on at this time concerning active Guard and Reserve fulltime manning. As you know, your civilian technicians are not at all pleased with some of the things that you folks are doing.

They have submitted, I think, to most members of this committee statistical information presenting their side of the issue in terms of the cost to the Government, the efficiency of the program, and what it does to the Guard and Reserve.

What I am going to do, rather than carry on a long discussion here today, is submit to you, for the record, a series of very detailed questions which will aid the committee in its deliberations. It certainly will aid me in deciding this very difficult issue.

I am sure that there are several sides to the story, there always are, and I expect that the chairman will have some questions as well. So to the extent that he asks them today, you need only answer my questions for the record. To the extent that he does not, I would like you to take those. I will give them to our staff director and have them submitted.

UPGRADING OF F-4 AIRCRAFT

The second area, I guess, would be for General Conaway, possibly General Gill, and Mr. Philbin. It has to do with proposals that we have discussed here on this committee concerning the upgrading of the aircraft in some of your units that are equipped with F-4's.

It is my understanding that there is an unsolicited proposal for a very substantial upgrade of the F-4 aircraft that involves reengining, new consoles, electronic consoles, and new radar. I believe the cost of that, compared to the cost of a new aircraft, is rather substantial.

With the North Dakota Air National Guard, when I was in Grand Forks on another trip, I had an opportunity to go up—I am a pilot—and fly the F-4 with the squadron commander up there. From what I could tell about that aircraft, and from what they indicated to me that it would do, it seems to me that that is a very sound proposal to bring this very capable aircraft, in the hands of some very extraordinarily well-qualified pilots, up to 1984 standards.

My question is, are you pursuing that actively? Are you having trouble with the regular Air Force procurement people in getting that accomplished? Just where are we on that particular subject?

General **CONAWAY**. Sir, if I may answer for the Air National Guard. I appreciate your flying with the North Dakota Air Guard, the Happy Hooligans, as they are known, one of our top air defense units.

We are looking at several proposals, along with the Air Force Reserve, the Air Force and the Department of Defense, of how we might enhance some of our F-4's. Not so much our F-4C's, since we hope to phase all of those out in the next 3 to 4 years, but the F-4D's and the F-4E's. As we receive the F-4E's, they may need some upgrading.

Enhancements are tied to aircraft procurement rates, and what is taking place currently with the cuts in the defense budgets, and what that may do to the procurement rates. While we may not be impacted that much today in the Guard and Reserve by what comes out of the appropriations bill or with the defense budget, we would be impacted in 1988, 1989, and 1990, particularly in the Air Guard, by fighter procurement rates.

So we are looking at what enhancements we might do, since the F-4D's and F-4E's may be with us even longer, considering the budget deficits that we are facing in this country.

I am personally against a $17 million per aircraft enhancement program, as proposed. I think that we can buy some new F-16's, for example, that may carry AMRAM or AIM-7's and AIM-9's, that could perform air defense as well as an air-to-air role for about the same price, and have a modern, state-of-the-art aircraft.

If we are unable to do that, I think that we can hit a compromise, happy medium, of making some minor modifications to our F-4's. In the air defense arena, for example, a new radar, and possibly a centerline tank that would increase the range considerably, along with an AIM-7 or AIM-9 capability that would provide an airplane that could last for several years yet and still be a good continental air defense aircraft.

Our F-4D's, in the air-to-ground mission, with an updated bombing system, can probably be modified for defensive purposes. AIM-9 modifications, for air-to-air roles can be helpful as well. These types of modifications are in the $1 million to $2 million category, not $17 million.

I guess what I am saying is that right now, at this point, we do not need to reengine the F-4D's and F-4E's.

USEFUL LIFE OF F-4D'S

Senator **Rudman**. What is the remaining useful life of the F-4D's? I understand that the C's are going to be phased out. We have had that hearing.

General **Conaway**. The D's are supposed to be with us until early 1991. We can foresee that possibly being extended, depending on how procurement rates go in the next year or two in the appropriations bill.

Senator **Rudman**. The figure that we saw was about $10 million a copy for the complete reengining, reconsole, the new tank, and so forth. I understand that the active duty Air Force categorically states that there is no requirement for modernizing the F-4. I assume that is the FULIMOUNT organization.

General **Conaway**. Yes, that is what they are speaking of.

Senator **Rudman**. I am sure the subcommittee would like to see a decision taken fairly soon in this area, because if we are interested in upgrading the capability of these units, then unquestionably you have to go one way or the other. Those aircraft are not fully capable of the missions that have been assigned to them in their present condition in terms of state of the art. I think that it is a shame because, if I remember the facts correctly, that particular unit from North Dakota, in the competition, consistently has placed at the very top of the rungs.

General **Conaway**. That is correct.

Senator **Rudman**. So they know what they are doing.

General **Conaway**. It is hard for them to do that now, competing against F-15's.

Senator **Rudman**. Exactly right. With the levels of skill of those people, I would hope that the Air Force, both active and Guard, would come to some decision as to what is going to happen.

There is also, of course, some very interesting potential for foreign military sales because there are literally thousands of F-4's around the world. That is another issue. We are talking about trade, and what-not, which we are all interested in.

General **Conaway**. I hear what you are saying, because F-4's are the backbone of the Air National Guard fleet. Of our 1,700 aircraft, I have over 700 F/RF4's, and they will be with us through the rest of this decade.

Senator **Rudman**. I hope that some consideration is given. I understand the dynamics of why the opposition, with the budget, and so forth. The only other comment, Mr. Chairman.

C-5 AND C-141 REFUELING

I understand that the New Hampshire Air National Guard currently is tasked with the major part of the trans-Atlantic refueling for C-5's, and other C-141's, and so forth.

General **Conaway**. That is correct.

Senator **Rudman**. It is significant to note, many people don't recognize this, that the chairman led a group of us down to Central America about 6 weeks ago. We were very interested and pleased to learn that much of the resupply mission to that area had been flown by Guard units.

General **Conaway**. That is correct.

General **Walker**. You might want to know that the Air National Guard only has 17 percent of the refueling capability of the Air Force, but with that 17 percent, today they are doing 30 percent of the air refueling.

Senator **Rudman**. Thank you very much, Mr. Chairman.

General **Gill**. Senator Rudman, if I could add to what General Conaway said.

Our F-4D's, and we are working with the Air National Guard, and we certainly support the fact that there are some rather modest modifications that can be made to the F-4D that would make some very significant improvement to the capability. One of those, of course, is to add the smokeless engine conversion. The AIM-9L and AIM-7N, 10-mil bombing accuracy, those all come to a rather small amount of money, when you are talking about the $10 million, somewhere in the neighborhood of $500,000 per copy.

We are both working very hard in the building of this, because those aircraft have got to be able to survive in combat.

Senator **Rudman**. I believe that we provided the conversion money for the missiles last year.

General **Gill**. I don't believe any money was provided for D's.

General **Conaway**. I think there is some in there, but it may be for the E models.

Senator **Rudman**. The one thing that became very clear to me, having some familiarity with equipment, is that if you are really going to use it for a while, at the very least it ought to have some new radar. That radar kind of looks like it was bought at Radio Shack in 1957.

General **Conaway**. Yes, sir, particularly for the air defense units.

Senator **Rudman**. Thank you.

Senator **Stevens**. Senator Stennis.

Senator **Stennis**. Thank you very much, Mr. Chairman. I will be very brief.

SUPPORT OF RESERVE FORCES

Mr. Chairman, gentlemen, the statements we have had this morning have been very revealing and encouraging. I contrast the situation with about 20 years ago, when a proposal was here which was almost an abolition of a major part of the Reserve Forces. That created quite a bit of interest. It was rejected by the Congress, and I believe it really brought strength to you, gentlemen, and your various groups.

You have had a numerical growth since then, more than that, you have gotten into additional roles. You are making a fine record. I am proud of it, too.

The members of the Reserve are leaders in the schools, the churches, and the community organizations. People listen to what they say about military and preparedness needs of the Nation.

I try to encourage the regulars to believe that and listen to that, and give a little more recognition to the Reserve—give them some supplies which still have the factory labels on them, rather than being worn out or secondhand. I think that you are doing a fine job.

I may be a little prejudiced because I have such pride in some of our units down home. They don't expect any favoritism. I like the idea of having these civilian soldiers back home.

SEABEES

I want to say a word for the Seabees. I was down in Puerto Rico for a short stay in the sunshine in early February. I got around quite a bit, and I ran into some Seabees down there. I was the only Member of the Congress who was along. They responded in just a few minutes of notice they had that we were coming. They responded in a fine way.

A young fellow took charge. He presented their matters, and what they were doing. He is just a credit to any organization. I had that belief before I found out that he is from Mississippi. [Laughter.]

I was mighty well impressed with him. It just shows what can be done, and it is another contribution that you are making to the welfare of the Nation. It is a little outside of the military maybe, but it is related.

I don't want to take too much time, but I want to highly commend you for what you are doing, and for the response you get from our young people.

That is all I have, Mr. Chairman.

Senator **Stevens**. Thank you very much, Senator Stennis.

Senator Leahy, you had a question you wanted to ask about Vermont.

Senator **Leahy**. Mr. Chairman, even though I am not a member of this subcommittee, although I am a member of the committee, I wonder if I could have your indulgence, Senator Stevens, just to raise one issue, which may at first blush appear to have even a parochial tinge to it.

Senator **Stevens**. I don't know, it might be out of order to be parochial on the subcommittee.

Senator **Leahy**. It probably never happened before, and I hate to start a new tradition in the Senate. I am sure that oldtimers in the Senate are just shaking their head wondering how this could happen, but occasionally some of us new guys seem to slip by. [Laughter.]

CLOTHING NEEDS OF VERMONT GUARD UNITS

I personally observed members of the Vermont Army National Guard unit wearing civilian clothing during their winter training. I hate to talk about the severity of Vermont winters, when the chairman is from Alaska. [Laughter.]

One of the weeks that I was up in Vermont this past winter, it stayed at 30 to 35 below zero all week long, and with the wind chill factor, it was considerably worse. When I asked why they were wearing civilian clothing, I learned that the Vermont Army National Guard doesn't have enough winter clothing and winter gear to equip all of its members. So they actually have to buy and pay out of their own pockets for such things as felt-lined boots, thermal underwear, and so on.

While the officers told me that the purchases of adequate stocks of winter clothing are authorized, funds are not available. We seem to have this lack of winter gear for the Vermont Army National Guard, chains for vehicles, truck heaters, tent heaters, and even enough tents. These are things that are aboslutely necessary. It does really get down to 30 and sometimes 40 below zero, and it certainly stays below zero for much of the winter anyway.

I intend Mr. Chairman, to ask that report language be included to direct the Army to allocate a half a million dollars from this year's budget for the purchase of sufficient supplies of winter clothing for the Vermont Army National Guard, and I would raise that at the full committee or whenever the chairman felt was the appropriate time to do that.

I was wondering if I could ask the question, Mr. Chairman, of General Dean. Would such a request on my part receive any objection from the Army Guard Bureau?

General **Dean**. Senator, I can tell you where we are, and maybe what we are doing will satisfy your requirement. If not, we certainly will be happy to do as you suggest.

Vermont had a shortage of $1.4 million in winter equipment in 1983. They purchased approximately $300,000 worth of equipment in that year, and it has not yet been delivered. In 1984, we did not have any additional funding. They do have $890,000 in Vermont for all equipment and clothing, some of which will be spent, as I understand, for winter equipment. If our OCE, which is our clothing budget, for 1985 and 1986 remains intact, we should basically solve Vermont's problem by that time. The half a million dollars, obviously, will help.

Senator STEVENS. If that doesn't work, we will send you some from Fairbanks, the kind that we wear when it warms up to 35. [Laughter].

Senator LEAHY. I understand. I appreciate the chairman giving me a chance to ask the question. I think, like everyone, we are so proud of the Guard in our own State. I don't know if the American people collectively realize what an enormous job all of these people do in the States. Each State, of course, has problems, whether it be climate, terrain, or anything else. I don't envy any of you the job of trying to coordinate that.

These are good people. These dedicated patriots, and hard working people, and I would just like to help them, if I can.

General WALKER. Senator, may I add something before you leave?

Senator LEAHY. Yes, General.

General WALKER. I certainly understand why you are concerned about Vermont, but I want to bring to your attention our total shortage in this area.

The Army National Guard has a shortage of approximately 57 percent of our cold weather clothing and equipment. You have surfaced, in my judgment, a real problem and I appreciate it.

Senator STEVENS. It is a very serious thing, too, because if you look at the map of the world in terms of the areas of our potential involvement, most of it is in cold weather countries.

General WALKER. We just might have to fight a war in the winter, sir.

Senator STEVENS. As a matter of fact, we have to get ready to fight anywhere, but it does seem to me that to assume that we are always going to be involved in desert warfare is going to get us into real trouble. I think that it is an important thing that the Senator has brought out.

Senator LEAHY. Thank you, Mr. Chairman.

Senator STEVENS. We don't have any extra up our way, so we won't really be able to help you.

RESERVE END STRENGTH

Incidentally, average strength for the Guard and Reserve are 22,300 lower than budgeted, yet as I see it, we have a request now for increased strength in fiscal year 1985 as far as the Reserve is concerned.

Isn't there an inconsistency there, to be in a position where we are not meeting the Reserve strength in the current budget, and to be budgeting a 52,200 increase for 1 year, when in the last 3 years we have had an increase to 200,000 strength?

I notice that the House has reduced the request down by 9,300. Is it realistic in terms of the strains that are on this budget to allocate the money to end strength, when you are not meeting your end strength now?

General **Walker**. You are speaking of the National Guard?

Senator **Stevens**. I am told that this is total Guard and Reserve.

General **Walker**. I am assuming that in the case of the National Guard, though, you are probably referring more to the Army National Guard, even though the National Guard is behind its strength, too.

The Army National Guard in 1984 was programed for 433,000 and the budget calls, I believe, for 447,000. If you ask "Are you going to make the 433,000?" I can tell you that we are going to try. However, I have to tell you that we are behind in our recruiting. This is brought about, in my judgment, by a couple of things.

First of all, the increase in the economy. The economy certainly has an effect on recruiting. Also there is a decrease in the available manpower pool. There will be a million less young men and women between the ages of 18 and 21 in 1985 than there were in 1979.

EQUIPMENT SHORTAGES PRIORITY

Senator **Stevens**. Let me ask you, wouldn't it be more realistic to look to some of the shortages. Take the Senator from Vermont's question in your response, the shortage of cold weather gear, an 87-percent shortage.

When we are trying to recruit people to come in and meet these goals for end strength, and we are already not making it, but we are asking us to allocate money for an additional end strength of 52,200 for the next year, wouldn't be more realistic to hold off and say, look, we have had a tremendous buildup in the Guard and Reserve over a 3-year period, let's get the gear, let's get the equipment that these people are going to want.

I think you will be in a situation where the new recruits will have the gear and equipment, and they will be badmouthing you all over the country. Your ability to hit an increase in end strength in future years is going to be even more in jeopardy. Am I wrong?

General **Walker**. Sir, speaking for the National Guard, you mentioned what the House Armed Services Committee had done.

Senator **Stevens**. Yes.

General **Walker**. I have no objection to what they have done.

Senator **Stevens**. Can we have some understanding that you are going to retarget some of this money and go toward the equipment needs.

General **Walker**. Yes, we would love to see that.

ARMY RESERVE READINESS

General **Berkman**. Mr. Chairman, if I could say a few words on that subject with respect to the Army Reserve. Obviously the readiness equation includes not only personnel, but training, equipment, and all of those things that go together to make up readiness. We ought to have all of those things.

In the Army Reserve, we are seeking an increase of some 12,000 in paid drill strength. The Army Reserve's current strength is off the program by approximately 4,700. We hope that by the end of the year, we will make the 1984 end strength, and that we will then be able to continue in the ramp up.

Indeed, in the Army Reserve, even with the request in 1985, we will be some 11,000 short of peacetime authorized, and approximately 36,000 personnel short of wartime requirements. It may be that additional incentives in the Army Reserve will address the challenge of the marketplace, and we are looking at additional incentives. It is very important that we continue increasing that very important element of the triad, as General Olmstead indicated, the personnel requirement.

Senator **Stevens**. I want to yield to the Senator from North Dakota, but first I want to see if I can pin you all down on something.

STOCK FUNDING LOW

I am worried about the request for increased end strength when we see evidence that the money in the stock fund is too low, and the money in the equipment fund is too low. I am worried that your recruits are going to come onboard, and be back drilling with guys in civies with wooden guns. You are going to get that photograph in the paper or on television, and everything we have done for 3 years is going to be wasted.

The priorities have to be to get those people you have recruited happy, get them their gear, and give them meaningful training. I believe that you are reaching out too far for too much end-strength increase in 1984 and 1985, and I would urge you to reexamine that.

The work that you have all done has been tremendous and you have support of the American people and the Congress. The issue that Senator Leahy raised is a good example of our concern. I think this type of thing could destroy the support you have.

I don't want to pursue this, I just want you to go back and look at this thing in terms of your priorities, as to whether this high priority on increased end strength is warranted under these circumstances.

Senator Andrews.

Senator **Andrews**. Thank you, Mr. Chairman. I just have a couple of questions. The subcommittee has covered a lot of stuff that I was interested in.

What the chairman has just said is so vital. He is talking about your goals of end strength in personnel. I serve on the Budget Committee as well as the Defense Subcommittee of the Appropriations Committee, and we are continually worrying about budget deficits. More than 40 percent of the defense budget is in personnel.

When you move toward increasing personnel without looking at these equipment shortages, and when we on this subcommittee take a look at a Congressional Research Service report that came out last December, Mr. Chairman, that pointed out that the Army Reserve has on hand just 34 percent of its wartime requirement for equipment. Aren't we getting the cart before the horse?

Since personnel costs are so high, wouldn't we be better off letting the equipment catch up, or can we mesh that equipment and personnel so we are a little more effective? Would we be better off moving a division out of active status, and using its equipment to flesh out the Guard or the Reserve, given this appalling figure of 34 percent of the equipment there?

Is this figure correct, and what are you doing about it?

EQUIPMENT ISSUE

Dr. **Philbin**. Sir, the personnel numbers that are presented in the budget, of course, are the result of an analysis of the wartime requirements, and a prudent judgment as to what we can make by way of recruiting and retention.

I can assure you that my office has spent the major portion of its energy in the 3 years that I have been there on the equipment issue. I think that we have a better handle on the onhand equipment, its condition, and the shortages than we have ever had before. We have just submitted our third volume of the equipment readiness report for the Guard and the Reserve 1 month or so ago.

Senator **Andrews**. What is the percentage of equipment that your Reserve units in the Army Reserve have on hand, is it 34 percent?

Dr. **Philbin**. It was in that vicinity for fiscal year 1982. Under the current year's analysis the Army Reserve equipment fill is estimated to be approximately 50 percent. However, as we look forward into 1987, despite the fact that we are adding equipment, requirements are rising faster than we are able to add equipment to the Guard and Reserve.

There is no question in my mind that equipment is the primary problem existing in the Guard and Reserve.

Senator **Andrews**. We have so much equipment. *X* number of units of tanks and armored personnel carriers, if you are talking about the Army, and we need so many men to fight them. Whether the mix is in the Reserve or the regulars is important from the standpoint of the fact that a Reserve person costs less than an active duty person, but it is also important that we don't add a lot of personnel and no equipment, thinking that if push comes to shove, suddenly we are going to find some equipment. It is ridiculous. You can recruit and train men just as fast as you can manufacture tanks, and to have these personnel keep going up and having personnel without equipment simply doesn't make any sense.

I would appreciate it, because I don't want to take the time of the committee, if you explain for the record a little bit more about this 34-percent figure, which bothers me greatly.

[The information follows:]

Army Reserve Equipment

The major challenge of this office over the past three years has been to define clearly the equipment situation in the Guard and Reserve. As of 30 June 1982, the equipment on-hand in the Army Reserve was estimated to be 34 percent of the wartime requirement. Since then substantial improvements have been made by the Army in its ability to define wartime equipment requirements and in its asset reporting processes. In addition, the Army Guard and Reserve are receiving more and newer equipment than ever before. As a result, a current estimate of the Army Reserve shortfall is in the range of 50 to 60 percent, a serious problem but one that is being given high-level attention. The goal of the Defense Department remains to equip all Active, Guard, and Reserve Components to their full wartime requirements. In view of fiscal reality, however, the interim objective must be to ensure that all units have sufficient equipment upon which to train, and the remaining resources are applied beginning with those units needed first upon mobilization. Thus, progress may appear slow, but it is being made.

F–4 RE-ENGINING

Senator ANDREWS. I understand that Senator Rudman mentioned re-engining the F–4's to get into the Air Guard, which is also an interesting subjecct with me, and you are going to do that. You said nice things about the Happy Hooligans up in North Dakota, and you darn well better because they are the best unit in the Air Guard. But this gets me to another point, almost the same thing.

CONGRESSIONAL RESEARCH SERVICE REPORT

I will quote from a Congressional Research Service report that came out in December of last year, to go along with the obvious concern we on this subcomittee have about the effect the Defense Department's budget has on the deficit. We think that these Reserve forces are inherently less costly than active forces.

The Congressional Research Service stated, "Personnel costs, including retirement, are lower because of the part-time status of the reservists. Operating costs are lower due to lower peacetime operation and training rates. It is estimated that, for example, comparably equipped tactical air squadrons of the Air Force Reserve components cost roughly 70 percent as much as active squadrons." I would imagine that this holds for the Air Guard.

Does it not, then, make sense to put some of our newer airplanes faster into their Air Guard units instead of adding units to the Regular Air Force, and increasing our personnel costs? If we are going to have *X* number of a given class of airplanes, the cost of running those airplanes is largely personnel costs after we have the capital costs there.

Are we wrong in assuming that it would be wise from the standpoint of the budget, and also prudent from the standpoint of our defense capabilities, since the Air Guard people can outfly and outshoot a lot of the Regular units, and they prove it time after time, to put those new planes in these Guard units, even if it is in Mississippi. I understand that they even have a pretty good one in Alaska. We know we have a good one in North Dakota.

If we are trying to be fit to fight, if we are trying to be ready to fight, why not give the good equipment to the people who are ready to go, instead of adding more and more units, and more and more personnel costs, in the Regulars?

Dr. PHILBIN. Well, sir.

Senator ANDREWS. If you agreee with me, just say, yes, I agree with you.

Dr. PHILBIN. You don't have to convince me, because I fly with them too, and I agree with you on the quality.

Senator ANDREWS. Can't we save cost and get the same defense preparedness?

Dr. PHILBIN. We can on a unit basis.

Senator ANDREWS. Don't go any farther than that. You have agreed, you know.

Dr. **Philbin**. No, I have not. Unfortunately, it is a more complicated problem than that. I would like to do what you suggest, but the total force problems has to be looked at in a greater context than cost alone.

As you say, the capital investment cost for the Guard, the Reserve, and the active is essentially the same. Essentially, the personnel costs and the operating tempo costs are what can be saved in the Guard and the Reserve, while maintaining a very high quality of military capability I might add.

F-15 AIRCRAFT THE KEY GUARD

Senator **Andrews**. Let me ask you this question. If this committee sees fit to appropriate money for a buy of so many F-15's, aren't those F-15's just as combat effective in the hands of an Air Guard unit that is well trained and up to go, than they are in the hands of a Regular Air Force unit, and at considerably less cost to the taxpayer?

Dr. **Philbin**. I would say, in general terms, that that is in fact true. The way the equipment is prioritized within the Department of Defense is based upon the deployment schedule under the war plan. The policy is the first to fight is the first to be equipped.

Senator **Andrews**. No one knows that better than we do, Mr. Secretary. The trouble is that you have turf territories in the Defense Department just like we have turf territories in the Senate.

Dr. **Philbin**. There is no question in my mind about that, Senator.

Senator **Andrews**. I understand how that goes, and the old stuff sort of flows to the Reserve and the Guard. But we are getting into such a budget crunch, and we want to maintain our preparedness, we want to be able to protect our freedom, and what we have to do is get the most cost effective mix.

I think that we have overlooked the talent and the abilities that reside in these Guard and Reserve units for too long, and we ought to start giving them some of the new equipment, because the personnel there are competent, trained, and much more cost effective than personnel in the regular units.

I would appreciate it, if you could provide for the record a little bit more information, and whatever information you can give us on that philosophy because in either the Budget Committee or in this subcommittee, or on the floor of the Senate, we are going to have to address this problem, and we hope we have as definitive information as we can have when we move to address it. You could be of service to us, as well as your backup people in the various services.

Dr. **Philbin**. Sir, the latest volume of the equipment readiness report will show you, in great detail, a breakdown of the equipment shortages in all of the Reserve and Guard components.

COST EFFECTIVENESS OF REGULAR UNITS VS. GUARD AND RESERVE

Senator **Andrews**. Also, could you provide some type of information on the cost effectiveness of a given weapon in the hands of the Reserve and Guard versus the Regular units?

Dr. PHILBIN. The compilation of cost effectiveness as between the Active, the Guard and the Reserve has only been produced within the last year, and it is only a first step. We do have fairly detailed data on cost effectiveness. As you have suggested, the Guard and the Reserve on a unit by unit basis, based on weapon systems, is in actuality cheaper than the Active Duty Force.

I will supply what I have for you, but at this time the study is not complete, and it does not include things like startup costs and retirement. That is a second step in the model.

Senator ANDREWS. That study is not going to do us a whale of a lot of good if it comes after markup, Mr. Secretary. So we would appreciate it if we could get it sooner.

Dr. PHILBIN. I will get that over to you, and have it handcarried.

Senator ANDREWS. Not to me, to the committee.

BUDGET APPLICATION TO AIR GUARD

General BERKMAN. Senator, if I may, before we leave the area that you have been developing, because the figures you were using related, I believe to the Army Reserve.

Senator ANDREWS. They did, and I expanded the concept over to the Air Guard.

General BERKMAN. I understand.

In connection with the Army Reserve, on a cost basis, the dollar value of the equipment, it is somewhat less than 50 percent on hand measured against wartime requirements. What the Reserve units need to have on hand is that essential level of equipment necessary to accomplish training, to be prepared to perform their wartime missions.

The other challenge that the army has is to see to it, if it does not have all of its wartime equipment on hand, that in the event of mobilization there is a system to get that necessary additional equipment to the units in time to meet deployment schedules in order to perform wartime missions.

The Army is giving a lot of attention to that system, to the redistribution of the equipment that would be available on mobilization to the appropriate Reserve units, as well as identifying that minimum essential level of equipment for training that units need to have now in order to be able to prepare for the wartime missions.

The Vice Chief of Staff, as a matter of fact, is going through a line-by-line analysis of that essential equipment for training. So the area is understood. It is receiving attention. Part of the problem is that the total Army does not have all of its equipment that is necessary for the total Army and that results in the allocation problems.

Senator ANDREWS. I know that, General, and you have touched right on the very sensitive nub of the problem. We didn't learn the lesson of 1939, when we had people training with wooden machineguns down in Louisiana trying to get ready. We are now back through the cycle, at the point where we have more personnel than we have equipment.

As I understand military tactics, your personnel ought to be backed up with reserves of equipment, because if you lose tanks or personnel carriers, or whatever else, General, and you know this better than I do, out on the frontline, you don't necessarily need all of that personnel. What you need is a replacement of equipment.

Now we don't have that. We don't even have enough equipment to go with the personnel we now have, and the personnel are the biggest cost factor in the Defense Department. It seems like we are looking at this thing through rear-view mirrors.

What we ought to do is cut back on some of this add-on in personnel until we catch up with the equipment, and put this equipment where it is the most cost effective, which is in the Guard and Reserve units. Am I wrong?

General **Berkman**. I understand you point, but when the Army Reserve has a force that is 35,000 short of its wartime requirements in personnel, I view that with some concern. I would like to see that problem get solved in addition to the equipment problem.

Senator **Andrews**. You are talking about shortage for peacetime training, My God, that is part of the thing. The shortages for combat effectiveness are even more glaring, and that is what this committee is concerned about.

I have taken too much time, Mr. Chairman, but I think that this is an extremely important issue, how we can do the cutting that we need to do.

NATO SPENDING COMMITMENT

I have one final area that I will leave with you, because the chairman brought it to my attention when we were in Europe. We are increasing our spending on our NATO commitment from $78 billion to $135 billion, or something like that. In the last 5 years, it has gone up.

Senator **Stevens**. In NATO?

Senator **Andrews**. Yes.

Senator **Stevens**. It has gone up from $95 billion, in 1981 to about $165 billion this year.

Senator **Andrews**. At a time when we are at a deficit, we are adding a $70 billion commitment, yet we are sending M-1 tanks over there that have three times the fire power of the M-60's they are replacing. We let the Europeans tell us, we need as many M-1 tanks and just as many personnel as we had with M-60's. That is crazy.

If you are going to put these new weapon systems into effect, you had better get more bang for the buck, and realize that when you deploy an M-1, you can get by with a third of the number of personnel, and have the same amount of fire power as you had with the M-60. Am I wrong, General?

General **Berkman**. I am not prepared to respond to that. I took that as a rhetorical question, Senator.

Senator **Andrews**. I just wanted to run that one by you, because that is where we are coming from, and it concerns us.

Senator **Stevens**. I think that you ought to save those questions for the time when we get the Secretary. This year we have reversed the procedure. We usually get the Secretary in first, but this year we decided to go through all of the hearings, and get him in last and let him answer some of these questions.

Senator **Andrews**. But since we are going to run the Guard and the Reserve by him in this overall thought process, if you could provide, for the record, some of the information that will give us some backup ammunition to use later on, we would appreciate it.

Thank you, Mr. Chairman.

Senator **Stevens**. Let me pursue that a little bit. We are going to wind up here because I have a matter coming up on the floor.

MILITARY PAY ITEM

The military pay item for the Reserve and the Guard is about $8.1 billion annually, that is for the 1984 level, and $2 billion of that is for retirement. We see that item increasing now on an annual basis. I want to ask you if any studies are being made on that subject.

As I talk to the young reservists and guardsmen around the country, they are more interested in current pay. Most of them are not really thinking about retirement, and yet we have built a system where the retirement is going to overcome the military pay within a very short period of time.

I want to ask, Mr. Secretary, is anything being done to look at this question of changing the pay structure for retirements for Reserve and National Guard people, and only including retirement for people who serve full time?

RETIREMENT

The Senator from Mississippi is interested in that, too, as we make this shift over to more and more Reserve and National Guard, one of the things that we have to look at is this retirement component. Is there any study being made of this problem?

Dr. **Philbin**. Yes, sir, there is. There is an ongoing study on military retirement as an overall aspect of the total force.

Senator **Stevens**. I am not talking about that. I am part of that. I am talking about this specific one that you face in the Guard and Reserve, as to whether guardsmen and reservists ought not to be given higher current pay, and not be part of any retirement system unless they go on full time active duty?

Dr. **Philbin**. I have not heard that proposal made before, Mr. Chairman, and I would tell you that I personally would oppose that. It was a very long, hard road, over decades, to develop legislation which gave any retirement to guardsmen and reservists. I think that if we change that in any substantial way, you will find a backlash from the Guard and the Reserve that we really cannot afford.

There are too many instances over history where guardsmen and reservists have been treated differently and not as equitably as people on active duty. I would suggest to you, even without a study, that such a move would be a mistake.

Senator **Stevens**. I suggest to you that it is just a matter of time now. Now 25 percent of your military pay is retirement pay. If projections are right, by the turn of the century, it will be better than 50 percent.

When you get to that point, the whole concept of the Guard and Reserve disappears. As the Senator mentioned, we will be back with a proposal to either merge the Guard and Reserve, or to merge them both into the active component because of the retirement costs. The retirement costs are staggering throughout the Government, but nowhere are they more apparent than in the Guard and Reserve.

Dr. PHILBIN. No one has ever compiled adequate data on the retirement costs of the Guard and the Reserve. My office, within the last months, has just started a program to do that. The data has not been compiled as yet.

Senator STEVENS. I am not saying that you are going to reduce the cost. I am saying that you would increase the compensation for those who are in the Guard and Reserve and have retirement benefits be available only to those who are on active duty.

Dr. PHILBIN. It is certainly something that can be considered, sir, but a back-of-the-envelope calculation will show that last year's cost was $1 billion for the Guard and the Reserve out of $16 billion. That is one-sixteenth of the annual retirement costs.

Senator STEVENS. You make my point. This year it is approximately $2 billion out of $8.1 billion.

Dr. PHILBIN. Sir, I think you are talking about the retirement accrual account.

Senator STEVENS. I understand that.

Dr. PHILBIN. Let me point out that the retirement accural figure was based on a single level percentage of basic pay for Active, Guard, and Reserve as mandated by the Congress. The figure really does not reflect the amount of the money or the precentage of the total retirement account which will go to the Reserve.

That subject is being studied at the present time, but the $2 billion figure does not show the true proportion of the retirement of the Guard and the Reserve versus that of the Active Duty, which last year was roughly about one-sixteenth on a dollar figure.

ACCRUAL ACCOUNTING

Senator STEVENS. I understand that we are on an accrual accounting basis. The Senator is gone who started this. Senator Bellmon of Oklahoma started a study of the whole problem of the unfunded liability on the national scene for retirement, both for military and civilian.

I think that we are going to have to pick up where he left off, one of these days, and carry it out to where we have some detail. Why don't you give us that information?

Dr. PHILBIN. Sir, we are compiling that data at the present time.

As I said, the reason that the Congress apparently mandated that a single composite percentage of basic pay was used for the retirement accrual account was because adequate Guard and Reserve data had not been compiled. We are now doing that. If we go to two separate figures, you will find that the Guard and Reserve figure is far less than the amount reflected in the budget submit.

Senator STEVENS. I understand that, but I want you to know that accrual accounting still doesn't put money in the bank.

Dr. PHILBIN. No, it doesn't.

Senator STEVENS. That liability is still there to make payments in the future, even though it is budgeted now. It is a very interesting thing that we are getting ourselves into as far as the future liability for retirement pay. I think that it ought to be looked at in terms of the Reserve and National Guard policy.

Let me go to just a couple of other matters.

BASIC QUARTERS ALLOWANCE FOR RESERVISTS

We questioned last year, and I want to question again, why do you continue to pay basic allowance for quarters to reservists who have their quarters provided?

Active military do not receive basic allowance for quarters if their quarters are provided. Why do we continue to do that as part of the Reserve and National Guard policy?

Dr. **Philbin**. Sir, I think that it is a misconception that reservists, when they do their weekend duties, especially when they do their 2-week annual tour, live at home and commute. In many cases, I would say the vast majority of cases, that is not true.

Our guardsmen and reservists go to bases far removed from their home. They usually stay on the base or near the base, and cannot stay at home. So the basic allowance for quarters is really an essential element of basic military compensation. If we remove that BAQ from the Guard and Reserve, our calculations show that the average citizen-soldier would have his Reserve pay cut by about a third. This is very different than the VHA issue.

Senator **Stevens**. It is not VHA, it is another matter. I am talking about basic allowance for quarters. You take a Guardsman who comes up to my State for 2 or 3 weeks of duty in the summertime, his total quarters are provided. They are not charged for them at all.

Dr. **Philbin**. But he still has to pay for his quarters at home, sir.

Senator **Stevens**. I assume he does. That is the role of the citizen-soldier. He doesn't have any increased expense, does he?

Dr. **Philbin**. Yes, sir, he might very well. Many times our guardsmen and reservists have to stay in hotels and motels.

OUT-OF-POCKET EXPENSES

Senator **Stevens**. That is another matter. If they have out-of-pocket expenses, we have no problem with that at all. My question pertained to when quarters are provided. Where is the increased expense for a person who comes in for a 2- to 3-week period of active duty training and has full quarters provided?

They still get a basic allowance for quarters paid to them even though they do not pay for their quarters. That was the information that we got last year, and I understand that it is the information again this year.

Dr. **Philbin**. As part of his basic military compensation, which is the same with the active duty people.

Senator **Stevens**. The active duty people do not get it, that is the point, that is why we raised the question. Active duty miliary people do not receive their basic allowance for quarters when quarters are provided.

Dr. **Philbin**. Are you talking about their family quarters, sir, on the base?

Senator **Stevens**. I am talking about the basic allowance for quarters payment, which you now say is part of compensation, but it is in addition to compensation, the compensation level for reservists.

Again there is a dichotomy here between the treatment of active duty people and reservists and guardsmen, and you are telling us that you want them treated the same, you just told me that.

Dr. **Philbin**. That is true.

Senator **Stevens**. Here I am giving you an example of where you pay a reservist and a guardsman payments that would not be received if they were on active duty.

Dr. **Philbin**. I don't believe that that is true, but I will have my staff look into it and we will answer that for the record, if we may.

Senator **Stevens**. I would like to see you do that. We asked the question last year, and your response this year is the same, that it is part of compensation. The basic allowance for quarters is not part of compensation.

Dr. **Philbin**. I will look at the aspect that you have raised, and I will have that answer to you as soon as possible.

[The information follows:]

Regular Military Compensation

In consonance with Title 37 USC Section 101(25) the Department defines "Regular Compensation" or "Regular Military Compensation" (RMC) as including the elements of basic pay, basic allowance for quarters (BAQ), variable housing allowance, basic allowance for subsistance, and Federal tax advantage. Basic Military Compensation (BMC) is similarly defined, in accordance with Title 37, to include all of the compensation elements encompassed by RMC, except variable housing allowance. These definitions have provided a basis for comparing military compensation to General Schedule salaries, as specified by Public Law 90-207.

BAQ compensation may be made to an individual either in cash or in kind. The entitlement to receive cash BAQ, in general, applies to military personnel on active duty except when the government housing is provided, or for members without dependents when assigned to field duty or sea duty. The application of the field duty or sea duty stipulation varies, by law, based on the member's paygrade, duration of the assigned duty, and specific circumstances surrounding the duty assignment. Inference that a Reserve Component member receives a cash BAQ benefit, while performing active duty of short duration, on a basis different from that of a full-time active duty member is incorrect.

A full-time active duty member with dependents receives cash BAQ if the member is not furnished with government quarters suitable to house the member's dependents. A full-time active duty member with dependents who is provided government quarters for his or her sole occupancy is still entitled to cash BAQ if government housing is not provided for the member's dependents. Reserve Component members' situations, while performing active duty of short duration, are no different. Government quarters, when available during these periods, are only provided for the individual member's sole occupancy. Inasmuch as government housing is not provided for the members' dependents, and since the members continue to incur housing costs on behalf of their dependents just as does a full-time active duty member, payment of cash BAQ as a part of BMC is certainly justified during these periods.

Inactive duty for training or "drill periods" are not periods of active duty and, therefore, do not come under the entitlement provisions of Title 37 in regard to BAQ. No BAQ is paid during inactive duty or "drill periods."

Basic Allowance for Quarters, either cash or in kind, is viewed as an integral part of Basic Military Compensation by the Department and the individual. An attempt to sever the element of BAQ as an entitlement for Reserve Component personnel while leaving the entitlement intact for members of the Active Component will most assuredly result in a sense of discrimination and inequity to the detriment of the overall military posture.

C–5 AND C–141 AIRCRAFT

Senator **Stevens**. The other question that I wanted to get into was the question of the C–5's and the C–141's. We are getting inconsistent recommendations concerning what is the best policy for the Reserves concerning C–5's and C–141's. What has been the request of the guard, the Reserve, and the Air Force for C–5's? Do you want them or not want them?

I have Senators coming to me saying that they don't want their Guard unit or their Reserve unit to have C–5's, they want C–141's, and they are asking us to mandate that you can only assign C–141's in certain areas. I don't like to get into that kind of a thing.

First General Conaway, and then you, General Gill.

General **Conaway**. Sir, we would rather not get into it either but work it as the programing of the force structure takes place in the Air Force, which is what we are doing. The Air Force has asked us in the Air National Guard to bed down a C–5 unit. We are looking possibly at second C–5 unit. There is a cost savings in doing that. Where there is a cost savings, and it can help the total Air Force, we will look at it.

Senator **Stevens**. Is the cost savings because you don't fly them as much as they do?

General **Conaway**. The cost savings, basically, would come from that, yes. We would fly them at a reduced rate, and the saving in the C–5 is in the flying hour program.

Senator **Stevens**. Would it reduce the effectiveness of the Guard of there was a deployment of the C–5 to the Guard instead of the C–141?

General **Conaway**. No, there would not. We could man and do what they want us to do with the C–5. The C–141 is similar, although is will be flown at a little higher rate, almost the same rate as the active Air force C–141's on these initial squadrons.

Senator **Stevens**. There is no real savings in the C–141's, is there?

General **Conaway**. Not if we go at 4 crew ratio, the same as the active components. On the C–5, they are talking about a 2 reduced crew ratio, which would fly half, or two-thirds the number of hours and that can be a saving with the new C–5's coming in.

Senator **Stevens**. We all visit with our people, and I visit with mine. I get the impression that they would rather have the assignment based upon need of the unit than based upon the concept of savings to the national budget, or on the concept of politics of what the local unit wants in terms of just their desires, what they would rather fly. What are you doing about it, very frankly?

General **Conaway**. Very frankly, General Gill and I are working very closely with the Air Force, and strategic airlift one of the big areas that is under discussion now. With the Air Force manpower constraints and the equipment that is coming to the Air Force, we are looking to help where we can in this arena. It is a very limited number that they are asking us to do right now, one C–141 unit and one C–5 unit.

General Gill is more into the heavy airlift business than we are in the Air National Guard, where we are more into the C–130 role. He would probably have some comments on that, too.

Senator **Stevens**. General Gill, I would like to go into that, and I would also like to ask you to answer one other question.

C–130 AIRCRAFT

Last year, I went into the question of C–130's for the Reserve. The Congress has added Air Guard C–130's but we have not had a similar request from people at home on the Reserve. You haven't had any C–130's, and you apparently haven't had any in the budget.

Is there a need for C–130's in the Reserve? I notice that you pointed out that your C–130A's are 30 years old, and the average age is 27.

General **Gill**. Yes, sir.

Senator **Stevens**. Do you need C–130's in the Reserve?

General **Gill**. Yes, sir. Of course, we appreciate the C–130's buys that have been added by Congress over the years.

Senator **Stevens**. They have all been for the Guard, you haven't had any of those, have you?

General **Gill**. Right now, it is 48 to 8, sir, that is what it is. I am a little concerned as to the equal distribution of those assets, yes, sir.

Senator **Stevens**. What about the C–141's and C–5's, is that going to be a political decision? Are we going to have to say, Senator X wants C–5's in one State, and Senator Y wants C–141 in another. Is that how they are going to be assigned?

General **Gill**. I would certainly hope not, sir. One of the things that is probably misunderstood, and it may be partially our fault in not trying to get that across, but for the last 15 years in the C–141, and the last 11 years in the C–5, we have Air Force Reserve-wise manned one-half of those aircrews and supplied 45 percent of the maintenance for the entire strategic airlift arena. I have over 1,300 fully qualified C–141 pilots that fly associate 141's at locations where the Air Force already is.

The best way, if we are going to convert into Air Reserve forces, at least from my standpoint, I have those Reserve crews, and they live in those local areas for the most part. For instance, around Dover Air Force Base, or around Travis Air Force Base. If you take the 141's out of these areas, you don't necessarily take those already trained air crew members with them.

To me, the best way, if you are going to convert full time—we are already half of the airlift requirement—it would be to convert in place where they already are, where you don't have to buy additional support equipment, build additional vertical structures, and all of the things that go with it.

We are working closely with the Air Force. We were asked by the Air Force to look at C–5's. I decided that the best beddown location would be Kelly Air Force Base, I submitted that to the Air Force. It is the C–5 depot and there are C–5's already on Kelly Air Force Base. Many of my reservists, who are now flying 130's, are maintenance men working in the Air Logistics Center there, and they are already qualified on C–5's.

It is very hard, though, to pick locations that you can bed down a C–5. It is a very large aircraft. It requires an awful lot of ramp. It also requires special runway conditions. So it is difficult to bed them down.

BED DOWN CAPABILITY FOR C–5 AND C–130

Senator STEVENS. It seems to me like some people are deciding, well, if we get some C–5's, maybe we will get a new hangar, and we will get some resurfacing of our fields, which are perfectly adequate for 130's and 141's.

I just wonder if someone behind some of these requests, and determining whether or not it is not a deployment scheme that is going to increase costs in the long run in terms of MILCON. It might decrease costs of operations of the C–5's.

General Conaway, do you want to comment?

General CONAWAY. Sir, that is one that we are looking at very carefully, and I know General Gill is.

Basically, we, in the Air National Guard, have two locations where we could bed down eight or nine C–5's for the Air Force, and they are aware of that. I can bed down a lot more 141's and 130's. So we are only talking about a maximum of two units into the outyears rights now for the Air Guard as we look at where I could put them. I don't have as many locations as General Gill does.

Senator STEVENS. Don't misunderstand me, if you want to take some up to Alaska and put them there, and build me a new Air Force Base, I will understand that. [Laughter.]

General CONAWAY. Sir, your question on the C–130 is excellent. We both appreciate the 130's that have come to enhance the capability for the Air Force. We both still have a lot of A models that we are trying to retire. I have over 40 left in the Air Guard, and General Gill has over 50. So we appreciate any help in modernization.

SUBMITTED QUESTIONS

Senator STEVENS. Thank you, gentlemen. Before closing the hearing, the committee will submit additional questions which we will ask you to answer for the record.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

ADDITIONAL COMMITTEE QUESTIONS

AVERAGE STRENGTH 1984

Question: Will you be able to meet your budgeted strength levels by the end of the year.

Answer: It is anticipated that the Reserve Components will meet their budgeted end strengths for FY 1984.

QUESTION: First Quarter Fiscal Year 1984 reserve strengths are 22,300 lower than budgeted. This represents a significant decrease from your Manpower plans. What indicators do you see that will cause your recruiting efforts to turn around?

ANSWER: Reserve strength is the result of our recruiting commands' ability to fill the selected reserve unit vacancies with quality young men and women, and the ability of the selected reserve commands to retain those trained personnel. Through the first quarter FY 84, the difference between programmed and actual levels of recruiting and retention resulted in 14,200 persons fewer than programmed end-strength, or one and four tenths percent. The table below shows first quarter reserve component strengths compared to first quarter President's Budget objectives:

First Quarter FY 1984
(End Strength 31 Dec 83)

Reserve Component	ACTUAL	1984 Column of 1985 Budget OBJECTIVES	Percent OBJ
Army Nat'l Guard(ARNG)	413,100	421,100	98.1
Army Reserve(USAR)	266,700	268,800	99.2
Navy Reserve(USNR)	109,700	112,400	97.6
Marine Corps Reserve(USMCR)	41,900	41,900	100.0
Air Nat'l Guard(ANG)	101,200	102,000	99.2
Air Force Reserve(USAFR)	67,200	67,800	99.1
DoD Totals	999,800	1,014,000	98.6

ARNG & USAR: There are no major indicators that the recruiting problems encountered by the Army Guard and Reserve have turned around. However, several positive steps have been taken to enhance the recruiting efforts. For example, the number of jobs available to prospective recruits have increased in the ARNG and USAR by 40 and 101 percent respectively. Additionally, both Reserve Components have hired additional recruiters and have increased their advertising efforts.

USNR: The USNR reported difficulty meeting its first quarter FY 84 recruiting objectives because of expanded goals for non-prior service personnel (new recruits). With recent increases in the numbers of recruiters and recruiting resources, the USNR expects to meet its total budgeted FY 84 end strength objective.

USMCR: Marine Corps Reserve recruiting is not experiencing difficulties this fiscal year. High school graduates, as a measure of quality, remain high at 95 percent of new recruits.

ANG: Air National Guard strength declined throughout the first quarter FY 84. Since then, strength has stabilized and shown a modest increase in second quarter. After analysis of first quarter FY 84 strength trends and review of personnel and accession policies, a recruiting strategy was implemented that includes command emphasis and closer interaction between the unit "Consolidated Base Personnel Office Chiefs" and the ANG recruiters. Further actions will include possible refinement of enlistment processing procedures. Additionally, ANG commanders are being asked to bring their units to no less than 97.5 percent authorized strength, which would assure achieving programmed end-strength in the ANG for FY 1984.

USAFR: First quarter FY 84 Air Force Reserve strength was less than one percent under the budget plan. Historically, the first quarter of each fiscal year has been a slow recruiting time. No problem in achieving programmed strength by the end of FY 84 is anticipated.

Question: Will the current strength shortages provide excess funding which could be used for other purposes?

Answer: Although it is anticipated that the Reserve Component budgeted end strengths for FY 1984 will be attained, the average strengths are expected to be somewhat below the level budgeted. The funding generated by this shortfall has been accommodated through absorption of a portion of the FY 1984 military pay raise, as reflected in the Supplemental Request, or is being applied within the appropriated budget activity to cover the costs associated with such areas as; higher than anticipated drill participation rates, School and Special active duty tours needed for readiness enhancement, and additional non-prior service accessions to fill wartime billet requirements.

FY 1985 STRENGTH INCREASES

Question: Since fiscal year 1980, Reserve strengths have increased by 200,000. In fiscal year 1985 you are requesting an additional increase of 52,200 Selected Reserves.

In light of budget constraints and efforts to limit defense spending, can any of this growth be curtailed?

Answer: Although the 52,216 strength increase requested for FY 1985 is needed to fill wartime requirement strength deficiencies, support mission area manning increases, and to meet Congressionally directed requirements, the revised FY 1985 Budget Request recently submitted does reduce this Selected Reserve increase by 13,900.

QUESTION: The proposed House Armed Services action would limit growth in the Selected Reserves to 43,690. This is 9,300 below your request. What would be the effect of this reduction?

ANSWER: The HASC mark on the FY 85 budget reduced Army National Guard (ARNG) average strength growth by 4,983 to include a reduction of 4,983 Active Guard/Reserve (AGR) end strength. Based on the revised FY 85 budget submitted to Congress by the President, the ARNG agreed to a 5,000 reduction from the increased growth of 9,951 AGRs requested in FY 85 and a decrease in paid drill strength (PDS) of 3,900. These reductions will slow the manning of units with required AGR support and PDS necessary to attain readiness objectives. The HASC reductions approximate the FY 85 President's Budget as revised.

GUARD AND RESERVE FY 1985 BUDGET

Question: The proposed House Armed Services action would limit growth in the Selected Reserves to 43,690. This is 9,300 below your request. What would be the effect of this reduction?

Answer: A reduction of greater than 3,000 from the present requested increase for US Army Reserve Full-Time Support has an adverse impact on the overall US Army Reserve Active Guard and Reserve program, readiness capability and most importantly the readiness condition of US Army Reserve units. The remaining growth of 1,678 based on the 4,327 end strength reduction seriously impairs a reasonable FTS growth objective of 9 percent by FY 89 and precludes any expectation of achieving a 14 percent growth by FY 89. The decrease of 4,327 is not supportive of any significant increase in readiness capability of the USAR at the unit level when considered in light of overall Full-Time Support requirements. In short, in order to implement a balanced program with a steady rate of growth over the next five years it is necessary to limit the US Army Reserve Full-Time Support reduction to 3,000 in FY 85, which will provide for 2,521 personnel growth to deploying units and 484 to support functions.

FULL-TIME SUPPORT ACTIVE GUARD AND RESERVE

Question: More than 19,000 of the requested increase in Reserve strength is for full-time personnel, the Active Guard and Reserve (AGRs).

Why is an increase of this magnitude warranted?

Answer: The requested increase was reduced to approximately 10,000 in the FY 1985 Revised Budget Request. Most of this growth is for full-time support of the Army National Guard and Army Reserve. Under Total Force policy, the Army is improving the equipment readiness of its Guard and Reserve units. To train drilling Guardsmen and Reservists to operate and maintain this equipment effectively requires an increase in full-time personnel. Since drill and annual training time is limited, qualified full-time personnel are imperative to ensure that this time is used effectively to gain proficiency with the sophisticated weapons systems of the 1980's.

Question: In your statement you mention that increases in full-time support are necessary, but you fail to mention if this increase is for Active Guard and Reserves or Civilian Technicians.

Is the requested increase in fiscal year 1985 for full-time support only AGRs or is there also an increase in civilian technicians?

Answer: The FY 1985 Budget Requests an increase in the technician force of 130.

Question: What mix of AGRs and civilian technicians do you think is appropriate?

Answer: The most appropriate mix depends upon the Guard or Reserve Component, the specific skills required, and the missions assigned. Our policy, consistent with Congressional guidance, is to provide the most cost effective full-time support force consistent with readiness requirements.

Question: The House Appropriations Committee Survey and Investigations staff claims that AGRs are more costly than civilian technicians who perform the same type of job.

Do you agree with this assessment?

Answer: No, we do not believe that either form of full-time support is inherently more costly.

Question: One criticism of the AGR program is that it has blocked the career progression of civilian technicians and drilling reservists.

What is the Defense Department doing to ensure that this does not occur?

Answer: The Department's Directive on full-time support of the Guard and Reserve, now in final coodination, requires that all personnel are provided with the opportunity for promotion, career progression, education, and retention consistent with program needs, strength limitations, and applicable statutory provisions. Military advancement must be based on the consideration of who is best qualified for promotion regardless of the member's status as a drilling reservist, technician, or AGR.

RESERVE BAQ/VHA

Question: In Fiscal Year 1984, Congress agreed with DoD's request to stop payment of VHA to Reservists because they do not incur housing costs associated with their Reserve duty. How does this position differ from your position on BAQ?

Answer: The DoD recommended that Reservists performing short tours not be entitled to VHA because they do not experience higher permanent housing costs (the problem VHA is intended to address) as a result of tours of less than 140 days. Reservists do continue to incur costs for maintaining their permanent residence while performing short duty tours, regardless of where they are assigned on military duty. The distinctions between the Department's position on VHA payments and BAQ entitlements were addressed in great detail in DoD's letter to the Chairman of the Senate Committee on Appropriations dated January 6, 1984.

SEA AND AIR MARINER PROGRAM

QUESTION Last year the Congress agreed to allow the Navy to recruit 10,000 Sea-Air Mariners if an average strength of 105,000 was attained within available funds.

Will the Navy be able to meet the required average strength?

ANSWER· The Navy will not achieve the end strength (118,000) necessary to reach an average strength of 105,000 in Fiscal Year 1984.

The recruiting and associated support personnel and funds programmed were insufficient to meet increased manpower requirements.

Continued high retention in the USN reduced the available market of Navy veterans.

Reserve vacancies are largely in E-4 and below billets and only a limited number of Navy veterans are available in these pay grades.

QUESTION. What are your projections for Sea-Air Mariner recruiting in 1984?

ANSWER. The Navy will recruit 10,000 Sea and Air Mariners in 1984.

QUESTION. How does this position match the statement in the recent report to the Congress on the Navy's Total Force?

ANSWER. This position is consistent with the position expressed in "A Report to Congress on the Navy's Total Force." In the report the Navy stated that 105,000 average strength was not attainable in Fiscal Year 1984 and that it would be necessary to recruit 10,000 Sea and Air Mariners to attain an end strength of 108,000.

COMMISSARY TEST

Question: Last year the Congress authorized a test allowing Reservists an expanded commissary benefit. Do you have any preliminary results from that test?

Answer: We will not begin a systemmatic examination of test data until this Fall. Early indications from commissary field managers indicate test activity has been relatively light although volume appears to be increasing.

Question: When is the test scheduled to conclude?

Answer: December 31, 1984.

Question: What is the cost of the expanded benefit on appropriated funds?

Answer: Possible additional costs are unknown at this time. The test data being gathered will permit the DoD to project additional appropriated fund costs that would be associated with permitting all Selected Reserve members to utilize their earned commissary benefits in the manner being tested.

Question: Is there any cost in the fiscal year 1985 budget request associated with this test?

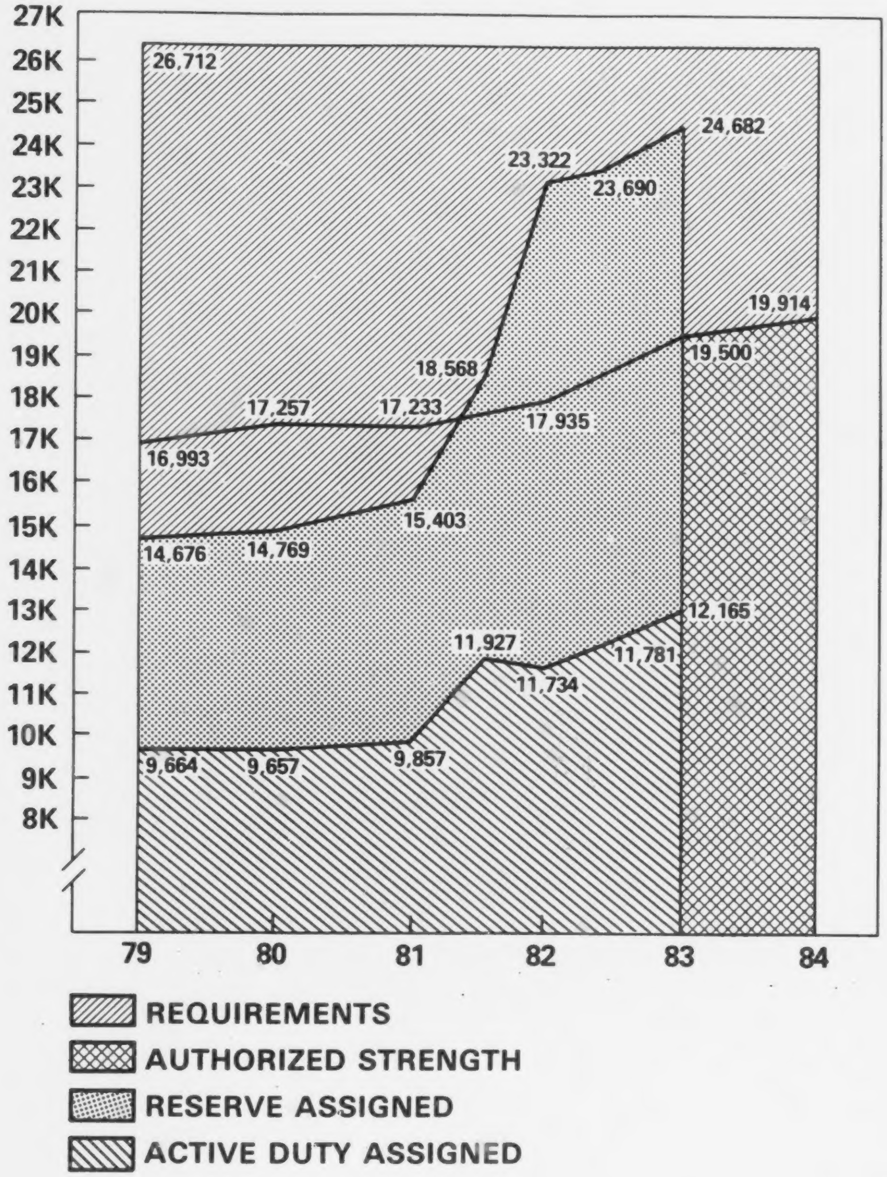
Answer: The only projected FY 85 test cost is $9,500 for processing test data. That cost will be absorbed with requested O&M funding.

Reserve Missions

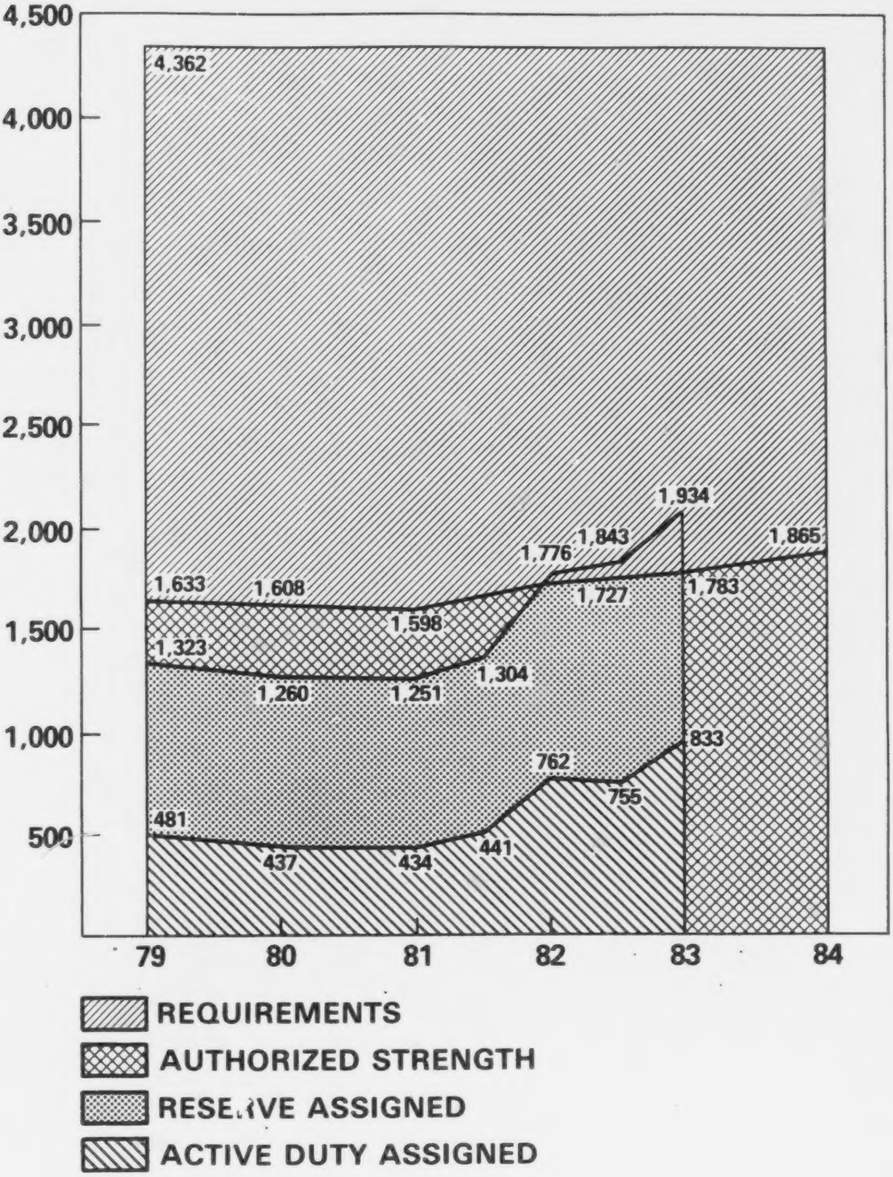
Question: What are the Reserves able to do to meet medical readiness needs?

Answer: Medical programs in the National Guard and Reserve are primarily relied upon to provide personnel augmentation to the active duty forces subsequent to mobilization. The attached charts show the Reserve Components' contributions of physicians, general surgeons, and nurses to meet Total Force wartime health care personnel requirements:

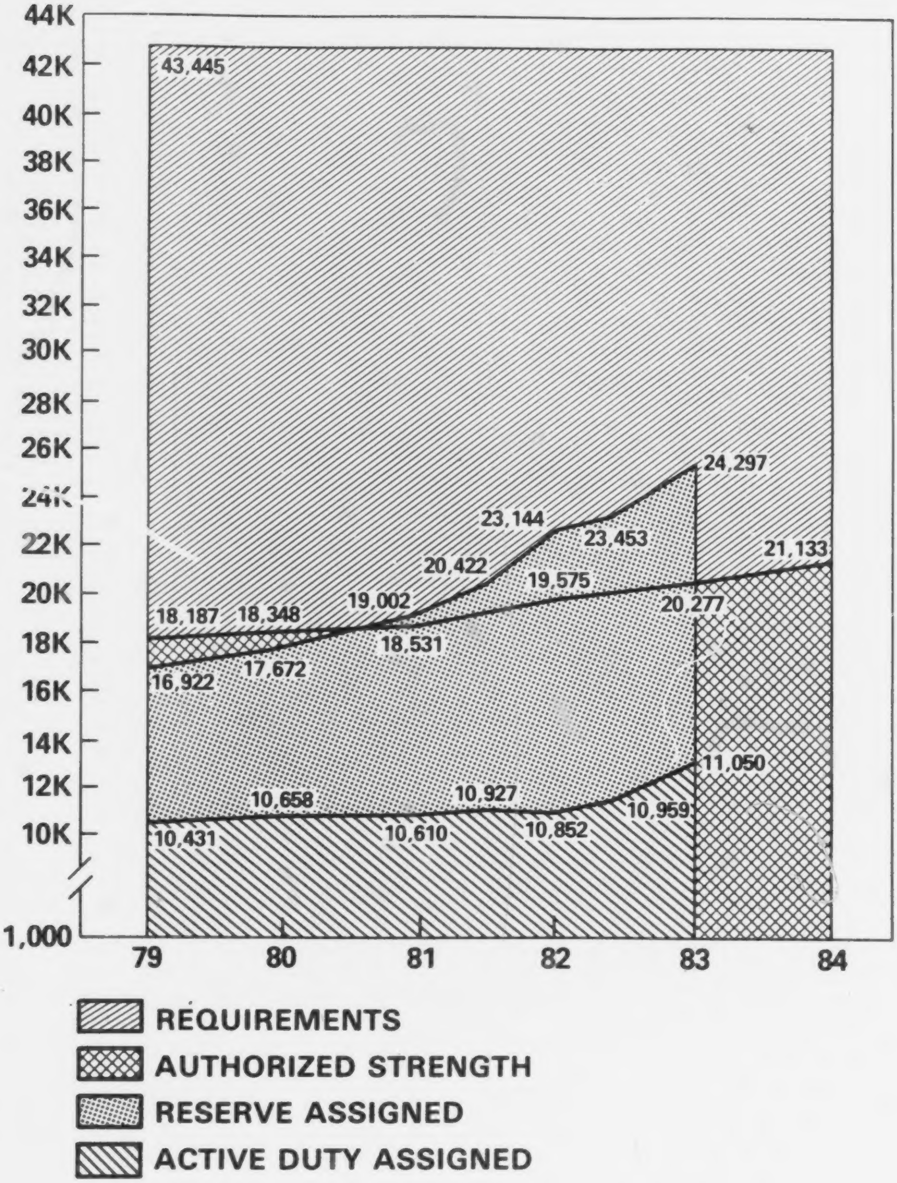
DoD PHYSICIANS



DoD GENERAL SURGEON



DoD NURSES


44K
42K
40K
38K
36K
34K
32K
30K
28K
26K
24K
22K
20K
18K
16K
14K
12K
10K
1,000
79
80
81
82
83
84
43,445
24,297
23,144
23,453
21,133
20,422
19,575
19,002
20,277
18,187
18,348
18,531
16,922
17,672
11,050
10,658
10,927
10,959
10,431
10,610
10,852
REQUIREMENTS
AUTHORIZED STRENGTH
RESERVE ASSIGNED
ACTIVE DUTY ASSIGNED

Reserve Missions

Question: Are there any wartime missions associated with medical readiness that are being turned over to the Reserves?

Answer: Yes. For example, the Reserve Components are expected to provide about 95% of the aeromedical evacuation crews in the Air Force. This reliance should increase to about 99% in FY 1989. In the Army, the Reserve Components are tasked to provide approximately 70% of the Army's deployable medical systems to meet projected wartime requirements.

Question: Can the Reserves meet any of the peacetime medical requirements?

Answer: Yes. Although the primary mission of the medical forces in the Reserve Components is to train for their mobilization mission, significant contributions are made to meet peacetime medical requirements as a by-product of this training. For example, Reserve Component medical units and individuals are often scheduled to perform inactive and active duty training during periods of reduced staffing in active duty medical treatment facilities.

Question: What percent of medical requirements are met by the Reserves? Can this be expanded?

Answer: The Reserve Components are expected to provide 62% of the health care personnel needed to meet projected wartime requirements. The Assistant Secretary of Defense for Health Affairs is currently conducting the Medical Force Sizing Study which will provide the basis for allocating the Total Force to the Active and Reserve Components. The study will be completed in February 1985. We recommend that the conclusions of this study be considered in the decision process to expand, reduce, or maintain the medical program in the Reserve Components.

Equipment Procurement for Reserves

Question: Your statement indicates that foreign military sales of equipment continue to impact the equipping of the Reserve Components.

How can the Special Defense Acquisition Fund be better used to prevent the diversion of equipment away from the Reserves?

Answer: Although there have been a few diversions of equipment from Reserve Component units during the previous fiscal year, we believe that the use of the $900 million annually in the Special Defense Acquisition Fund to finance acquisition of equipment in anticipation of sales will be of considerable assistance in reducing this problem. Since the management of the fund must be directed toward anticipated demands of foreign customers, rather than the U.S. military, it does not appear possible to reorient the fund management specifically toward the Reserve Components.

Question: How much is in the 1986 procurement estimate for the Reserves?

Answer: A detailed listing of equipment to be procured for the Reserve Components in FY 1986 is not available at this time. This information, which was prepared for FY 1984 and FY 1985, was extracted manually at a considerable effort. However, for next year's budget submission we will provide data for Reserve Component equipment procurement for all four years in the P-1 exhibit.

EQUIPMENT SHORTFALL

QUESTION: You estimate the shortfall in Guard and Reserve equipment now exceeds $24 billion, reflecting the increased role of the Reserves. The Department's "Force Readiness Report" estimates the shortfall at the end of Fiscal Year 1987 will be $14.3 billion and that some of these shortages could be offset by equipment in POMCUS or other equipment stocks.

Based on the execution of existing plans to distribute equipment funded in the current 5-year defense plan, what is your estimate of what the equipment shortfall will be in 1990?

ANSWER: First, let me expand upon the reference to the Force Readiness Report. Guard and Reserve equipment data are found primarily in the Annex to Volume II of the Force Readiness Report. These data are not all-inclusive; they represent only a sampling of Guard and Reserve equipment. Thus the $14.3 billion figure does not indicate improvement over the current total shortfall estimated at $24 billion; it bears no relation to the $24 billion. The Annex data are best used to establish trends in the equipping of the Guard and Reserve and not to define gross shortages, inventory increases, etc. Also, there is no intent to alleviate Guard and Reserve equipment shortages with POMCUS stocks. The Annex refers to the Army's Reserve Components laying claim to some equipment left behind by Active forces which would deploy to POMCUS sites.

Due to the complexity of the issue, it is not practicable to attempt to forecast a dollar shortfall for the year 1990. The major challenge of this office over the past three years has been to define clearly the equipment situation in the Guard and Reserve. In my view, considerable progress has been made but far more is needed before we can establish a finite assessment of Guard and Reserve equipment.

However, information contained in the FY 85 Annex would suggest that the problem now estimated to be $24 billion may be greater than that by 1990. This is based upon the Annex data which note that increases to Guard and Reserve equipment requirements outstrip increases to inventories by 14% over the reporting period, FY 83-FY 87, despite sizable equipment increases.

These increased requirements are due to two sets of circumstances which reasonably may be expected to continue throughout the foreseeable future. The first is modernization, the replacement of older, less capable equipment with newer, more efficient, yet also more costly, equipment. The second set of circumstances surrounds the continuing review of roles and missions with an eye to expanding those of the Guard and Reserve rather than those of the Active forces where feasible.

Thus, even though the Reserve forces are receiving more, newer, and better equipment than ever before, it is not at all clear that the increases will keep pace with the requirements or, of even less likelihood, begin to offset them. It remains, however, the charge of this office to expedite the clarification of this issue and to strive for its resolution.

QUESTION: Of this amount, how much of that is needed to fill unit shortages and how much for filling war reserve stocks?

ANSWER: References to Guard and Reserve equipment shortages pertain to only unit shortages unless otherwise indicated. War reserve stocks consist of equipment available to post-mobililization claimants irrespective of Active, Guard, or Reserve component. Such stocks usually are addressed in the aggregate of the total Service.

QUESTION: Last year Congress added over a billion dollars for Reserve Component procurement -- 70 percent to the Air Force and 21 percent to the Army. Your report suggests that more than half of the shortages are in the Army.

As Congress considers funding for the Reserve, what is the most effective way to apply the resources to biggest needs?

ANSWER: It is the Department policy that, in a constrained fiscal environment, resources must be applied at the intra-Service level beginning with the first units needed upon mobilization, irrespective of Active, Guard, or Reserve Component. The only exception to this policy is that all units must have available sufficient equipment with which to train. The ultimate goal is to equip all units to their full wartime requirements. National strategy must determine the proper inter-Service resource allocation.

ARNG COMMUNICATIONS AND ELECTRONICS EQUIPMENT

There are four major areas where equipment rates will be lower than 50 percent, ranging between 5 and 27 percent. These areas are communications and electronics equipment for the Army and Navy, plus missiles for the Air Force Reserve.

QUESTION: How much money could be effectively obligated in those areas in 1985 and 1986?

ANSWER: The Army National Guard (ARNG) has approximately a 77 percent fill of its communications and electronics equipment on hand. However, only half of this equipment is of a generation that could easily be interfaced with Active Component (AC) communications equipment when deploying upon mobilization. The ARNG has four Corps Area Signal Battalions, eight Division Signal Battalions and sixteen

Signal Platoons that are equipped with 1950's technology communications equipment. This first generation communications equipment, compared to today's state-of-the-art equipment, is extremely limited in capability. It is also incapable of being secured for transmission purposes. If separate appropriations were provided, the ARNG could effectively obligate $50 million in 1985 and another $50 million in 1986 for the procurement of communications and electronics equipment to improve the near term readiness of both its signal and non-signal high priority units.

GUARD AND RESERVE FY 1985 BUDGET

QUESTION: There are four major areas where equipment rates will be lower than 50 percent, ranging between 5 and 27 percent. These areas are communications and electronics equipment for the Army and Navy plus missiles for the Air Force Reserve. How much money could be effectively obligated in those areas in 1985 and 1986?

ANSWER. The area communications system for the total Army is currently under revision by the Battlefield Communications Review (BCR). A new signal unit force structure for both the Active and Reserve Components, including a new family of equipment and new organizational documents will be developed in this effort. Although all requirements and resource issues have not been resolved at this time, it will be appropriate to fund at least two area signal battalions in FY 85/86. Fiscal Year 1984 directed procurement has satisfied some requirements, but an additional $75 million could be utilized in 1985/86 to complete procurement of communication equipment for these units. The following communication/electronic shortages also exist in certain USAR units that are scheduled for deployment before D+30 days in event of mobilization:

a. $1.6 million for frequency modulated tactical radios.
b. $12.0 million for electronic test equipment.

These funds could also be effectively obligated in FY 85 or FY 86.

COMMUNICATIONS AND ELECTRONICS EQUIPMENT

QUESTION: There are four major areas where equipment rates will be lower than 50 percent, ranging between 5 and 27 percent. These areas are communications and electronics equipment for the Army and Navy plus missiles for the Air Force Reserve.

How much money could be effectively obligated in those areas in 1985 and 1986?

ANSWER: The National Guard and Reserve Equipment Report for Fiscal Year 1985 indicates that the Naval Reserve is deficient in communications/electronics equipment for Fiscal Years 1985 and subsequent years. The reason for this apparent deficiency is the phased introduction, during those years, of new computerized training equipment to replace or upgrade existing, less capable equipment in the Naval Reserve Security Groups.

OBLIGATIONS FOR AFR MISSILES

QUESTION: There are four major areas where equipment rates will be lower than 50 percent, ranging between 5 and 27 percent.

These areas are communications and electronics equipment for the Army and Navy plus missiles for the Air Force Reserve. How much money could be effectively obligated in those areas in 1985 and 1986?

ANSWER: The Air Force does not separately budget for the missiles provided to the Air Force Reserve. The Air National Guard and the Air Force Reserve draw, as necessary, from Tactical Air Command (TAC) War Readiness Materiel (WRM) stocks to fill captive carry and load trainer requirements. This is another example of the fully integrated nature of the Air Force Regular and Reserve Forces. The 1985 revised President's Budget requests $940 million in FY 1985 and $2.1 billion in FY 1986 for tactical air launched missiles. A portion of these assets is destined for the TAC stocks.

EQUIPMENT SHORTAGES

QUESTION. Your report gave no indication of the status of the major equipment items for the Navy and Marine Air elements and Navy ships.

What is the nature of their major shortages?

ANSWER: With two exceptions, the Naval Air Reserve Force has a full complement of aircraft equipment on hand. The exceptions are C-9 aircraft to replace the retiring C-118 aircraft and a delay in the assignment of F/A-18 aircraft to replace A-7B aircraft. The Congress has adequately supported the Navy program with funding to procure used DC-9 aircraft.

Reserve Strike Fighter Squadron 303 at Naval Air Station, Lemoore is utilizing F/A-18 aircraft assigned to Fleet Replacement Squadron VFA-125 and will not receive its own complement of F/A-18's until late 1986. The transition period was extended because of decisions concerning F/A-18 Fleet introduction sequence and global CV scheduling.

There are a number of modernization requirements to replace aging aircraft in the Naval Air Reserve. However, I am pleased with the aggressive program of horizontal integration within Naval Aviation that is equipping the Naval Reserve Force with F-14's, E-2C's, A-7E's, and F/A-18's.

The Naval Surface Reserve has major equipment shortages as follows:

- Direct Support Units
  - Mobile Inshore Undersea Warfare (MIUW) ($4.8 million)
    Shortages are TSQ108 vans, and some rolling stock.
  - Reserve Naval Construction Force (RNCF) ($143.4 million)
    Equipment requirements are for civil engineering support equipment, material handling equipment, camp collateral equipment, hand tools, tool kits and consummables.
  - Reserve Cargo Handling (RCHB) ($8.7 million)
    Shortages exist in material handling equipment, civil engineering support equipment, hand tools, hatch box equipment, generators and personal gear.
- Augment Units
  - Explosive Ordnance Disposal ($1.4 million)
    Equipment shortfalls are in underwater ordnance location systems.
  - Shore Intermediate Maintenance Activity (SIMA)/Naval Reserve Maintenance Training Facilities (NRMTF) ($2.5 million)

Deficiencies are in shop equipment, hand tools and a limited amount of material handling equipment.

Naval Security Group ($3.5 million)

Deficiencies include receivers, antennas, teletypes and some secure communications equipment. This is training equipment only and will not be used upon mobilization.

The Naval Reserve has made good progress in securing required equipment over the past two years. Moreover, Navy Program Sponsors provided excellent support to the Naval Reserve in POM-85. The shortages listed above are being considered by program sponsors in their POM-86 deliberations, and I am optimistic that most of the shortages will be accommodated.

NAVY AND MARINE AIRCRAFT AND NAVY SHIPS SHORTAGES

QUESTION: Your report gave no indication of the status of the major equipment items for the Navy and Marine Air elements and Navy ships. What is the nature of their major shortages?

ANSWER:The Marine Corps Reserve's major aircraft shortages are in the AH-1 and KC-130 communities. In Fiscal Year 1988, the Marine Aviation Master Plan calls for filling the reserve AH-1 Squadron, which currently has 8 of its 24 plan requirement. This change parallels increases in the active force and represents major improvement in the Corps' critically short attack helicopter capability.

The Reserve Wing also has a requirement to complete the KC-130 Squadron at Glenview, Illinois and standup an additional squadron at Stewart Air Base New York. Benefiting from Congressional foresight in Fiscal Year 1982, the reserve Wing recently took delivery of four new KC-130T aircraft. Fiscal Year 1983 and Fiscal Year 1984 appropriations have also funded a total of four additional KC-130 aircraft toward satisfying this critical shortage. Thirteen additional aircraft are required to complete the two Reserve VMGR (KC-130) Squadrons.

NAVY RESERVE SEARCH AND RESCUE HELICOPTERS

QUESTION: I understand that some UH-60 helicopters have been added in the House Authorization bill for a San Diego based Naval Reserve Search and Rescue squadron. The implication is that such a capability is needed and could have been used to rescue LT Goodman when he was recently shot down over Lebanon.

Explain how these Naval Reserve helicopters will support the active Navy search and rescue mission worldwide.

ANSWER: If funds are appropriated, the UH-60's added by the House Authorization bill will be assigned to HC-9, the Navy's only squadron dedicated to combat search and rescue. With just two UH-60's assigned, we will have only limited capability to support the active Navy Combat Search and Rescue (CSAR) mission. These two UH-60's will be used to develop CSAR tactics applicable to these specific aircraft and as the first increment in modernizing the Navy CSAR capability. There are sufficient personnel assigned to the squadron to support contingencies with short term detachments of 30 days or less. To support long range objectives, mobilization would be required.

MISSION SUPPORT AIRCRAFT

QUESTION: Six additional replacement and modernization C-12s for the Reserve support fleet have been proposed by the House recently. Last year this Committee directed development of a time phased master plan for upgrading the Army and Air National Guard administrative and support aircraft fleets. What is the status of that plan and when will it be provided to the Committee?

ANSWER: The Air National Guard plan is to give highest priority to replace C-131s in those western states with high field elevations and mountainous terrain. These would be followed by the states with detached alert requirements and geographically separated units. The distribution would be based on an assumed procurement as a result of Congressional adds of 6 C-12s per year in 84 and 85. As the C-12 fulfills certain C-131 needs, the requirement for a larger type aircraft capable of carrying 15-30 passengers and/or cargo, still exists at some C-131 locations. Although the replacement of C-131s has not been competitive with other Air Force priorities in the Five Year Defense Plan (FYDP), we would foresee replacing these at the same rate of six per year.

CIVILIAN TECHNICIANS AND AGR'S

Question: What percent of AGR's entering the full-time manning program were voluntary conversions from civilian technicians?

Answer: This information was not systematically collected and is not readily available.

Question: Are current drilling Reservists being forced into status-quo technician positions because of the addition of AGR's into some units. How many civilian technicians/drilling reservists have been affected. Is this policy being continued? Why or why not?

Answer: There is not now nor has there been a policy to force technicians out of their military positions as drilling reservists and, therefore, "into status-quo technician positions." The elimination of the practice of double-slotting initially affected the military position of some technicians. "Double-slotting" was the assignment of an AGR or active component member against in a full-time status against the part-time military position of a technician. Such cases should no longer exist. Should such a situation occur, the technician would not be forced out of the military position.

CLOTHING SHORTAGES

QUESTION: I understand that many Guard and Reserve units are required to supply their own clothing and other personal equipment because the Guard and Reserves do not have the resources available to provide these products. How pervasive is this problem?

ANSWER: There is no requirement for an individual to supply his own clothing and equipment.

CLOTHING SHORTAGES: ARMY RESERVE

QUESTION: I understand that many Guard and Reserve units are required to supply their own clothing and other personnel equipment because the Guard and Reserve do not have the resources available to provide these products. How pervasive is this problem?

ANSWER: There may be isolated instances of US Army Reserve personnel supplying their own clothing, however this is not considered to be a pervasive problem.

QUESTION: What is the total shortfall of clothing and other personnel equipment for the National Guard and Reserve?

ANSWER: There is presently no significant shortfall of individual clothing and equipment in the Army National Guard (National Guard Personnel, Army appropriation).

There are shortages in organizational clothing and equipment (Operation & Maintenance, Army National Guard Appropriation), especially in the lower priority units. These shortages are caused by clothing becoming worn out, obsolete, or new items being fielded. Of the 70 items contained in the DA established list of "To Accompany Troops" (TAT), the ARNG has a shortage of approximately $170 million from the wartime requirement of $379.8 million.

QUESTION: What is the total shortfall of clothing and other personnel equipment for the National Guard and Reserve?

ANSWER: Presently there are no significant shortfalls of individual clothing and equipment in the Reserve Personnel, Army (RPA) appropriation. However, the total Operation and Maintenance, Army Reserve (OMAR) unfinanced requirement for organizational clothing and individual equipment is approximately $51.8 million.

OTHER EQUIPMENT SHORTAGES

QUESTION: The Analysis Volume to the 1985 Force Readiness Report on equipment shortages does not address shortages of stock fund equipment purchased with O&M funds. By each Reserve Component, what is the dollar value of projected shortages at the end of Fiscal Year 1984 for stock funded items? Briefly describe or categorize those shortages.

ANSWER: Army National Guard stock funded Organizational Clothing and Equipment (OCE) is projected to have a shortage of $508 million at the end of FY 84. OCE funding provides for replacement of items consumed, purchase of new items being introduced into OCE, additional OCE required to support manning turnover and a reduction of the backlog. In FY 85, projected consumption will exceed $100 million and will increase throughout the outyears. At the end of FY 84, there are projected shortages in Chemical Defense Equipment ($44.5 million), Cold Weather Clothing and Equipment ($138.1 million), camouflage screens and support sets ($142.6 million), and miscellaneous equipment ($182.8 million). This miscellaneous equipment category includes numerous items authorized by Modified Tables of Organization and Equipment and Common Tables of Allowances such as tentage, medical sets, test equipment, tool kits and communications installation kits, just to name a few.

QUESTION: The Analysis Volume to the 1985 Force Readiness Report on equipment shortages does not address shortages of stock fund equipment purchased with O&M funds. By each Reserve Component, what is dollar value of the projected shortages at the end of Fiscal Year 1984 for stock funded items? Briefly describe or categorize these shortages.

ANSWER: The Army Reserve projected shortages at the end of Fiscal Year 1984 is $66.4 million. While the Army Reserve has made great strides in improving its stock funded equipment shortages, the following is a description of type shortages:

Chemical Defense Equipment
Cold Weather Clothing and Equipment
Other Organizational Clothing and Equipment (OCIE)
Other CTA and MTOE Equipment
Medical Equipment Sets

STOCK FUND EQUIPMENT SHORTAGES (O&M)

QUESTION: The Analysis Volume to the 1985 Force Readiness Report on equipment shortages does not address shortages of stock fund equipment purchased with O&M funds. By each Reserve Component, what is the dollar value of the projected shortages at the end of Fiscal Year 1984 for stock fund items? Briefly describe or categorize those shortages.

ANSWER: The projected shortages for stock fund equipment purchased with O&MNR funds for the Naval Reserve will amount to approximately $6.0 million at the end of Fiscal Year 1984. These shortages are categorized as follows.

CATEGORY	SHORTAGES ($ 000)
Reserve, Naval Construction Force Equipment	1,489
Mobile Inshore Undersea Warfare (MIUW) Equipment	2,472
Aircraft Squadron Support Equipment	1,729
Shipboard Equipment (Damage Control, Safety, etc.)	300
	5,990

MARINE CORPS RESERVE

QUESTION: The Analysis Volume to the 1985 Force Readiness Report on equipment shortages does not address shortages of stock fund equipment purchased with O&M funds. By each Reserve Component, what is dollar value of the projected shortages at the end of Fiscal Year 1984 for stock funded items? Briefly describe or categorize those shortages.

ANSWER: Stock fund equipment requirements for the Marine Corps Reserve fall into two categories, training allowance items and those items required for full wartime commitment. Training allowance (T/A) items are purchased with O&M funds and are held by the units concerned. The current shortages within the T/A is approximately 6 million dollars and is comprised of a broad range of training equipment for Reserve Combat, Combat Support, and Combat Service Support units.

Full table of equipment (T/E) items beyond those required for T/A are programmed for storage in the Stores System until mobilization occurs. Given the varying mobilization options for the

Reserve, the withdrawal of equipment from the Stores System is dependent upon the specific mobilization scenario as Force requirements are matched against available materiel resources. The end of Fiscal Year 1984 projected shortages for the Reserve are inclusive within the total force stock fund requirements and are dictated by the mobilization withdrawal sequence.

OTHER EQUIPMENT SHORTAGES

QUESTION: The Analysis Volume to the 1985 Force Readiness Report on equipment shortages does not address shortages of stock fund equipment purchased with O&M funds. By each Reserve Component, what is dollar value of the projected shortages at the end of Fiscal Year 1984 for stock funded items? Briefly describe or categorize those shortages.

ANSWER: Based on known program objectives and barring unforeseen problems and costs with the equipped C-5 squadron beddown at Kelly AFB, Air Force Reserve O&M funding to purchase stock fund items is adequate to accomplish essential mission requirements.

QUESTION: The Analysis Volume to the 1985 Force Readiness Report on equipment shortages does not address shortages of stock fund equipment purchased with O&M funds. By each Reserve Component, what is dollar value of the projected shortages at the end of Fiscal Year 1984 for stock funded items? Briefly describe or categorize those shortages.

ANSWER: ANG FY 84 projected shortages of O&M funded equipment is $5.4 million. These initial or replacement shortages are comprised of aircraft and vehicle maintenance tools, aircraft and vehicle test equipment, communications electronic test equipment, flood lights, severe weather clothing and measurement devices.

QUESTIONS SUBMITTED BY SENATOR D'AMATO

ADEQUACY OF NBC EQUIPMENT

QUESTION: Do you believe the chemical/biological/radiological (CBR) defense equipment required by your units' current Tables of Organization and Equipment (TOEs) (or equivalent authorization documents) is adequate to allow your units to conduct sustained combat operations in a CBR contaminated environment?

ANSWER: The Nuclear, Biological, Chemical (NBC) equipment issued to Army National Guard (ARNG) units is the same equipment found in active component units. We are aware of proposed improvements underway to increase our effectiveness in certain NBC environments; however, I am confident that the Army has the best possible NBC defense equipment permitted by current resources. The ARNG is dependent on the Army materiel/combat development community for future changes in either equipment or doctrine.

Equipment alone, however, does not guarantee the ability to sustain combat operations. Even the best defense equipment reduces operational capability. Encapsulating soldiers put a barrier between them and their weapons and isolates them from each other. The difficulty of doing even simple tasks slows the ability to respond to battlefield requirements. The loss of mission and communication breaks down teamwork. The additional decisions about employing detectors, decontamination, heat load and work-rest cycles, and human needs overload unit leaders. The logistic support burden for the force in the field is increased enormously. Thus, defense measures result in 30-50% loss of capability. The longer units must operate this way, the worse off they become as the impact compounds. Defense equipment and procedures are certainly necessary but are not sufficient in themselves. The loss of capability provides an overwhelming advantage to the force which initiates chemical warfare. The only effective counterbalance is to impose a similar loss of capability by reprisals in kind.

QUESTION: Do you believe the chemical/biological/radiological (CBR) defense equipment required by your units' current Tables of Organization and Equipment (TOE's) (or equivalent authorization documents) is adequate to allow your units to conduct sustained combat operations in a CBR contaminated environment?

ANSWER: The Nuclear Biological Chemical (NBC) equipment issued to US Army Reserve (USAR) units is the same equipment found in active component units. We are aware of proposed improvements underway to increase our effectiveness in certain NBC environments; however, I am confident that the Army has the best CBR defense equipment available within resource levels. The USAR is dependent on the Army material/combat development community for future changes in either equipment or doctrine.

Equipment alone, however, does not guarantee the ability to sustain combat operations. Even the best defense equipment reduces operational capability. Encapsulating soldiers puts a barrier between them and their weapons and isolates them from each other. The difficulty of doing even simple tasks slows the ability to respond to battlefield requirements. The loss of mission and communication breaks down teamwork. The additional decisions about employing detectors, decontamination, heat load and work-rest cycles, and human needs overload unit leaders. The logistic burden for the force in the field is increased enormously. Thus, defense measures result in 30-50% loss of capability. The longer units must operate this way, the worse off they become as the impact compounds. Defense equipment and procedures are certainly necessary but are not sufficient in themselves. The loss of capability provides an overwhelming advantage to the force which initiates chemical warfare. The only effective counterbalance is to impose a similar loss of capability by reprisals in kind.

MARINE CORPS RESERVE

QUESTION: Do you believe the chemical/biological/radiological (CBR) defense equipment required by your units' current Table of Organization and Equipment (TOE's) (or equivalent authorization documents) is adequate to allow your units to conduct sustained combat operations in a CBR contaminated environment?

ANSWER: The quantities of NBC defensive equipment within the Table of Equipment (T/E) of SMCR units are adequate. The equipment itself, even though it is the best currently available, is not adequate to sustain operations in an NBC environment.

TOE's FOR CBR

QUESTION: Do you believe the chemical/biological/radiological (CBR) defense equipment required by your units' current Tables of Organization and Equipment (TOE's) (or equivalent authorization documents) is adequate to allow your units to conduct sustained combat operations in a CBR contaminated environment?

ANSWER: The CBR equipment authorized in our units' current Tables of Organization and Equipment (TOE's) is the latest equipment available through the Federal supply channels. The suits are bulky and cause extreme heat stress. No portable shelter capable of providing a protective environment currently exists, however, initial procurement is programmed for FY 87.

QUESTION: Do you believe the chemical/biological/radiological (CBR) defense equipment required by your units' current Tables of Organization and Equipment (TOEs) (or equivalent authorization documents) is adequate to allow your units to conduct sustained combat operations in a CBR contaminated environment?

ANSWER: No, in order to **[deleted]** **[deleted]** in a CBR contaminated environment, the Air National Guard requires two main items: first, sufficient collective protection systems and second, sufficient quantities of the second generation chemical protective ensemble. Collective protection systems are required to enable personnel to decontaminate, rest, and eat between duty shifts. The second generation protective ensemble will be capable of being decontaminated and reused for continued operation.

CHANGES IN NBC EQUIPMENT

QUESTION: What changes would you recommend in type, design, quality, or quantity of CBR defense equipment for your units?

ANSWER: The Nuclear Biological and Chemical (NBC) defense equipment requirements are the same for Army National Guard (ARNG) units as with the active component. ARNG units are issued the same NBC gear/protective masks, etc., as the active component. I am confident that the Army has the best possible NBC defense equipment permitted by current resources. The ARNG is dependent on the expertise of the Army materiel/combat development community for improvements in current NBC equipment.

QUESTION: What changes would you recommend in type, design, quality, or quantity of CBR defense equipment for your units?

ANSWER: The Nuclear Biological and Chemical (NBC) defense equipment requirements are the same for US Army Reserve (USAR) units as with the active component. USAR units are issued the same NBC gear/gas masks, etc., as the active component. I am confident that the Army has the best CBR defense equipment available, within resource levels, to operate in a NBC environment. The USAR must rely on the expertise of the Army materiel/combat development community for recommended changes or improvements on current NBC equipment.

MARINE CORPS RESERVE

QUESTION: What changes would you recommend in type, design, quality, or quantity of CBR defense equipment for your units?

ANSWER: The U.S. Army (DoD executive agent for NBC research, development, test and evaluation), the U.S. Air Force, and the U.S.

Navy have programmed an extensive NBC equipment development effort. The Marine Corps closely monitors these other service efforts as well as foreign government NBC equipment development efforts. Planned improvements in SMCR capabilities include procurement of improved personal protective equipment, increasing the capabilities of equipment to operate in chemical and nuclear warfare environments, and procurement of new chemical agent alarms and decontamination apparatus. The Marine Corps has developed plans for follow-on individual protective systems; detection, identification and warning systems; decontamination systems; and collective protection equipment.

CHANGES IN CBR DEFENSE

QUESTION: What changes would you recommend in type, design, quality, or quantity of CBR defense equipment for your units?

ANSWER: We would like to see lightweight, reuseable suits and portable shelters developed and issued to our units.

QUESTION: What changes would you recommend in type, design, quality or quantity of CBR defense equipment for your units?

ANSWER: The Air National Guard recommends two design changes. First, we need to improve our chemical agent detection capability so that we have a rapid method of determining the presence of a chemical warfare agent. Our current detecting methods are too slow -- if chemical agents are not used in an attack, we needlessly remain in chemical protectve equipment for longer periods than are necessary. Second, we need to design a protective ensemble that is less cumbersome and that doesn't present a heat stress problem. This need is particularly necessary for our aircrew members who must be as unemcumbered as possible during combat operations.

NBC DEFENSE EQUIPMENT

QUESTION: What proportion of the CBR defense equipment required by your unit TOE's is actually authorized?

ANSWER: Overall the Army National Guard is authorized 95% of required defense equipment. The only exception is the protective mask which is authorized one per individual assigned.

NBC EQUIPMENT AUTHORIZATIONS

QUESTION: What proportion of the CBR defense equipment required by your unit TOEs is actually authorized?

ANSWER: Based on a sampling of the current most critical items of equipment, it was found that 100 percent is authorized. The only exception is the protective mask which is authorized on the basis of one per individual assigned.

CHEMICAL, BIOLOGICAL, AND RADIOLOGICAL WARFARE

rapidly identify and quantify agents and appropriate collective protection systems are essential to any sustaining operating capability. Our research efforts are aimed at developing such items, but we should not delay procurement of items that offer improved performance to what is now on hand in hopes of future superior equipment. We must fill our voids with the best equipment now available.

The Navy is moving forward with procurement of the British Mark III CBR protective suit, which has been determined to be the best "off the shelf" item to meet our immediate individual protection needs. We have already received and distributed 40,000 to our amphibious forces.

The Navy-developed long range chemical warfare directional detector (AN/KAS-1) is operational. Production line units will start delivery this summer.

Other items being evaluated for rapid procurement include the Air Force protective mask MCU-2P (XM-30), the British AR-5 respirator for Marine helo aircrews and the portable Chemical Agent Monitor (CAM).

QUESTION: What proportion of the CBR defense equipment required by your unit TOE's is actually authorized?

ANSWER: The exact equipment requirements of individual units is under review. As we conduct more tests, evaluations, and exercises in simulated contaminated environments and examine the results of similar tests conducted by other nations, our equipment needs will change in quantity and mix.

The proportion of CBR defense equipment authorized varies from unit to unit, as the nature and quantity of CBR defensive equipment for given units are mission and scenario dependent.

QUESTION: What proportion of the CBR defense equipment authorized by your unit TOE's is actually on hand in serviceable condition?

ANSWER: The proportion of authorized CBR defense equipment on hand also varies from unit to unit. For instance, our Construction Battalions are fully equipped with masks and protective clothing, while our aviation squadrons have virtually no such equipment.

Our Naval Reserve Force frigates have the same allotment of this gear as the rest of the fleet, which is 100 percent coverage for exposed personnel (World War II allowance). We will soon have one set for each crewmember. Many of our augment units will not receive CBR protective gear until the 1990's.

This range of equipment on hand parallels that of the active duty Navy.

MARINE CORPS RESERVE

QUESTION: What proportion of the CBR defense equipment required by your unit TOE's is actually authorized?

ANSWER: All CBR defense equipment in the Table of Equipment (T/E) of SMCR units is actually authorized. The equipment is either being held at each reserve training center, at regional storage facilities/supply depots, or is programmed and will be acquired as funding is made available.

AUTHORIZED TOE'S FOR CBR

QUESTION: What proportion of the CBR defense equipment required by your unit TOE's is actually authorized?

ANSWER: Our units are 100 percent authorized for current individual protective ensembles; warning/detection devices, decontamination equipment, and collective sheltering are included in Air Force budget requests.

QUESTION: What proportion of the CBR defense equipment required by your unit TOEs is actually authorized?

ANSWER: Air National Guard units have been authorized 100% of required CBR defense equipment.

NBC DEFENSE EQUIPMENT

QUESTION: What proportion of the CBR defense equipment authorized by your unit TOE's is actually on hand in serviceable condition?

ANSWER: The key unit Table of Organization & Equipment (TO&E) items are the chemical-biological protective mask, chemical agent alarms, decontaminating apparatus and radiac meters. Equipment on hand in units is in serviceable condition. This equipment is periodically inspected, tested, calibrated and, if found to be unserviceable, sent to a maintenance facility for repair or replacement. The following table compares the status of this equipment for the Army National Guard (ARNG) to the status for the Total Army.

Item	Army National Guard (ARNG) % Fill	Overall Army Average
M17 Protective Mask	96%*	98%
Chemical Agent Alarm	40%	42%
Decontaminating Apparatus	98%	77%
Radiac Meters	40%	41%

* To be 100% by end of FY 84

Recent procurement efforts have emphasized improving and fielding individual protective items (masks and overgarments). Meanwhile extensive research and development work is underway to design better detectors and alarms. Fielding of one new alarm (the M8A1) is beginning in FY84; a second will start in FY85 (the Chemical Agent Monitor-CAM); and a third is scheduled in FY86 (the XM21 Remote Sensing Chemical Alarm).

TO&E items comprise a major portion of a unit's Nuclear Biological Chemical (NBC) defense equipment but do not give a complete picture since many of the critical chemical defense items are stock funded, such as the chemical protective overgarments. The ARNG plans to have a complete fill of protective overgarments by FY 86. Equipment for roundout units and Rapid Deployment Force units is issued with the same priority as the active component parent unit. For instance, the ARNG participated in the Army's program to upgrade the protective mask inventory. Although there are shortages, the shortages are in line with the overall Army averages.

QUESTION: What proportion of the CBR defense equipment authorized by your unit is actually on hand in serviceable condition?

ANSWER: The key unit Table of Organization & Equipment (TO&E) items are the chemical-biological protective mask, chemical agent alarms, decontaminating apparatus and radiac meters. The following table compares the status of this equipment for the Army Reserve to the status for the Total Army.

ITEM	ARMY RESERVE ON HAND	OVERALL ARMY AVERAGE
M17 Protective Mask	96%*	98%*
Chemical Agent Alarm	15%	42%
Decontaminating Apparatus	88%	77%
Radiac Meters	44%	41%

*To be 100 percent by end of Fiscal Year 1984.

Recent procurement efforts have emphasized improving and fielding individual protective items (masks and overgarments). Meanwhile extensive research and development work is underway to design better detectors and alarms. Fielding of one new alarm (the M8A1) is beginning in Fiscal Year 1984; a second will start in Fiscal Year 1985 (the Chemical Agent Monitor-CAM); and a third in Fiscal Year 1986 (the XM21 Remote Sensing Chemical Alarm).

Equipment for roundout units and Rapid Deployment Force units is issued with the same priority as their Active Component parent unit. For instance, the Army Reserve participated in the Army's program to upgrade the protective mask inventory. Although there are shortages, the shortages are in line with the overall Army averages.

TO&E items comprise a major portion of a unit's Nuclear Biological Chemical (NBC) defense equipment but this does not give the complete picture. Many of the critical chemical defense items are stock funded and do not appear on unit TO&Es. Examples are chemical protective overgarments, gloves and boots. The Army Reserve plans to have a complete fill of protective overgarments by Fiscal Year 1986.

MARINE CORPS RESERVE

QUESTION: What proportion of the CBR defense equipment authorized by your unit TOE's is actually on hand in serviceable condition?

ANSWER: The Marine Corps Reserve has approximately 92% of its authorized training allowance (T/A) in CBR defense equipment on hand and in serviceable condition. The 8% deficiency consists primarily of NBCD suits and radiac meters. These deficiencies are funded and are being procured on an availability basis.

TOE'S ON HAND

QUESTION: What proportion of the CBR defense equipment authorized by your unit TOE's is actually on hand in serviceable condition?

ANSWER: At present, the Air Force Reserve units have 75% of their authorized CWDE assets on-hand in serviceable condition. Shortages have been ordered utilizing FY-83/84 funding. Estimated delivery of this equipment is Aug-Oct 84 due to manufacturer back orders.

QUESTION: What proportion of the CBR defense equipment authorized by your unit TOEs is actually on hand in serviceable condition?

ANSWER: 64% of the CBR defense equipment authorized for the Air National Guard is on hand. There are 4,268,695 total line items authorized with 2,713,062 items on hand. This table lists examples of some of these items:

Item	Authorized	On Hand	Percentage
Masks	68,345	49,653	72.7
Suits	221,764	188,050	84.8
Flyer's Helmet	2,760	1,968	71.3
Filter Assembly	5,259	2,567	48.8
Mask Assembly	5,395	2,311	42.8

NBC DEFENSE EQUIPMENT

QUESTION: Have you received sufficient resources to provide your units with 100% of their authorized CBR defense equipment levels?

ANSWER: No, in the Procurement Army funded area we have shortages of alarms, decontaminating apparatus, radiacmeters, etc. and in the stock funded area (Operation and Maintenance) the ARNG has only 49.5% of the total individual Chemical Defense Equipment (CDE) requirement. Due to the high rate of consumption and the changeover to new types of CDE, such as the camouflage overgarment, this percent figure changes constantly. The total CDE shortfall at the end of FY 84 is projected to be $44.5 Million.

NBC EQUIPMENT FUNDING

QUESTION: Have you received sufficient resources to provide your units with 100 percent of their authorized CBR defense equipment levels?

ANSWER: In the procurement funded area the Army Reserve has shortages of detection and warning equipment and decontamination equipment compared to TO&E authorizations, as noted in the previous answer. We have received sufficient O&M resources to provide our units with 90 percent or better of their authorized levels of stock funded chemical defense equipment (CDE). However, because the size of the Army Reserve force has changed significantly over the past few years and new improved chemical defense equipment such as the camouflaged overgarment and M9 Detector Paper is available, we still have shortages. The Army Reserve plans to complete initial issue of stock fund CDE to all units in Fiscal Year 1986.

CHEMICAL, BIOLOGICAL, AND RADIOLOGICAL WARFARE

QUESTION: Have you received sufficient resources to provide your units with 100% of their authorized CBR defense equipment levels?

ANSWER: No, and therefore the Navy has established a policy of incremental improvement of our CBR defensive posture. In order best to utilize available resources and make initial rapid improvements, we have established priorities of providing protection to the fleet first, followed by shore facilities. Within the fleet, amphibious forces and carriers have the highest priority.

While much still needs to be done, much has already been accomplished afloat and ashore. The training and awareness level of personnel at all levels continues to improve. We know that much can be accomplished with what is already available, and the initiatives of putting this into practice are force wide.

MARINE CORPS RESERVE

QUESTION: Have you received sufficient resources to provide your units with 100% of their authorized CBR defense equipment levels?

ANSWER: Current funding is adequate to provide SMCR units with 100% of their authorized training allowance (T/A) of NBCD equipment. The stores system is programmed to provide the difference between the Table of Equipment (T/E) and the T/A to designated SMCR units upon mobilization.

RESOURCES FOR CBR DEFENSE

QUESTION: Have you received sufficient resources to provide your units with 100% of their authorized CBR defense equipment levels?

ANSWER: The Air Force Reserve used $2.1 million of the $15 million provided by Congress in the FY 83 Authorization Bill to procure CBR defense equipment. These funds, in addition to those already in the budget for CBR equipment provided adequate funding to procure 100% of our known requirements.

QUESTION: Have you received sufficient resources to provide your units with 100% of their authorized CBR defense equipment levels?

ANSWER: Yes, funding level is sufficient to provide all authorized CBR defense equipment items for Air National Guard units currently tasked for possible mobilization to a high threat area.

TRAINING SUPPORT

QUESTION: Do you believe active duty forces are providing adequate allowances for your units' training needs on their posts, bases, installations, and firing ranges?

ANSWER: The training requirements of the Army National Guard (ARNG) are being met on active installations to the extent possible under current resource constraints. As a result of these constraints, ARNG training support requirements compete with Active Component (AC) requirements. The AC has first priority for all ranges, training areas, training aids, devices and simulations. Occasionally, ARNG units will schedule training on active installations only to lose priority for training areas, ranges, and/or training aids and devices to the AC. ARNG units are having difficulty in drawing Multiple Integrated Laser Engagement System (MILES) equipment, essential to realistic tactical training, for use at Local Training Areas. Because not enough MILES equipment is currently available, the U.S. Army Training and Audio-visual Support Center (TASC) policy does not allow for the MILES equipment to be removed from the installation for use at ARNG training areas on weekends.

ACTIVE COMPONENT (AC) TRAINING SUPPORT

QUESTION: Do you believe active duty forces are providing adequate allowances for your units' training needs on their posts, bases, installations, and firing ranges?

ANSWER: The Army Reserve receives excellent support from the Active Component in providing for the use of training facilities at AC posts, bases, and installations. Sometimes there are scheduling problems when more than one unit wants to use a particular range or training area during the same period but these are relatively minor problems and are easily resolved. At most AC installations the Reserve Component (RC) has priority for use of facilities during the typical periods of heaviest RC use (June, July and August).

SUPPORT FROM THE ACTIVE FORCE

QUESTION: Do you believe active duty forces are providing adequate allowances for your units' training needs on their posts, bases, installations, and firing ranges?

ANSWER: Yes, the training support being given to us by the Navy's active forces is more than adequate.

QUESTION: Do you have any recommendations for improving support for your units by active component units, posts, bases, or installations?

ANSWER: No, as the Navy's total force continues to grow, becoming more and better equipped, we expect to share fully in the improvements.

MARINE CORPS RESERVE

QUESTION: Do you believe active duty forces are providing adequate allowances for your units' training needs on their posts, bases, installations, and firing range?

ANSWER: Training in the Marine Corps is centrally managed and reserve units have equal access to facilities operated by active bases and stations. Procedures required to use training facilities are the same for all units, active or reserve. Instructions which provide accessability of training resources for annual training duty are clearly stated in Marine Corps Directives. When reserve units have a requirement for the use of a training facility, scheduling is accomplished through reserve liaison officers located aboard the installation.

UNITS' TRAINING NEEDS

QUESTION: Do you believe active duty forces are providing adequate allowances for your unit's training needs on their posts, bases, installations, and firing ranges?

ANSWER: Cooperation from the active force bases has historically been limited by their capability to provide training particularly during our weekend training assemblies. We have recently provided full-time technicians at 23 of our locations to coordinate our requirements with the active duty host base and then oversee this training.

QUESTION: Do you believe active duty forces are providing adequate allowances for your units' training needs on their posts, installations, and firing ranges?

ANSWER: Yes, the Air National Guard has become a full partner in the Air Force's training exercises. Our units deploy to Europe and participate in NATO exercises along with active duty units. We also participate in large scale field training exercises such as Red Flag, Blue Flag and Checkered Flag.

TRAINING SUPPORT

QUESTION: Do you have any recommendations for improving support for your units by active component units, posts, bases, or installations?

ANSWER: Experience indicates resource constraints and conflicting priorities at active component installations restrict the level of support available for Army National Guard (ARNG) units. The ARNG has requested Department of Army support for a comprehensive Interlocking Training Strategy. This strategy proposes that: (1) devices and simulations be developed for use at the garrison training area/armory to train through platoon level; (2) local training areas (LTA) be developed which can be used to train through company level to include company/team combined arms live fire exercises or their subcaliber/Multiple Integrated Laser Engagement Systems (MILES) equivalent, and (3) annual training at major training areas be devoted to battalion task force maneuver/combined arms live fire exercise training. The Army National Guard (ARNG) will be receiving 55 company sets of MILES to be used specifically on ARNG training sites during FY 85-86. Recently, there has been increased interest in designing company training packages which are device/simulation oriented for use in armories. The improvement of LTA within reasonable commuting distance of units, to include ranges and maneuver areas, will enhance the proficiency and readiness of ARNG units. The development and acquisition of devices/simulations to meet the unique requirements of the National Guard (such as, the Guard Unit Armory Device Full-crew Interactive Simulation Trainer (GUARD FIST) Family of Training Devices concept being proposed by the Guard), along with LTA improvements will considerably lessen the support burden of active installations.

ACTIVE COMPONENT SUPPORT RECOMMENDATIONS

QUESTION: Do you have any recommendations for improving support for your units by active component units, posts, bases, or installations?

ANSWER: No, I don't have any specific recommendations. I would like to emphasize the extremely positive effect the CAPSTONE program has had on support from the Active Component. All of the various CAPSTONE unit training categories, Roundout, Roundup, Affiliation and Mobilization and Deployment Capability Improvement, have established Active and Reserve Component relationships that provide for continuing mutual support.

MARINE CORPS RESERVE

QUESTION: Do you have any recommendations for improving support for your units by active component units, posts, bases, or installations?

ANSWER: The development of recommendations for improving support of reserves aboard active training installations is an ongoing process. Host command responsibilities are clearly delineated in existing directives. Conferences are held between reserve units and their active force host prior to each training evolution. This is complemented by formal training support agreements which are developed to the benefit of all participants.

This method of developing and improving support for reserve units aboard active installations is effective and is meeting the needs of the Marine Corps Reserve.

IMPROVED SUPPORT BY ACTIVE COMPONENT

QUESTION: Do you have any recommendations for improving support for your units by active component units, posts, bases, or installations?

ANSWER: We are working closely with our active component gaining commands and bases to involve Reserve units in chemical attack response exercises, shelter activities and decontamination exercises. Theater training requirements are achieved in deployment exercises such as CHECKERED FLAG and VOLANT PARTNER which involve deployments to the theaters every three years. We have proposed CONUS exercises in the intervening years to provide further training.

QUESTION: Do you have any recommendations for improving support for your units by active component units, posts, bases, or installations?

ANSWER: Air National Guard units that are collocated on active duty bases have attained an excellent degree of rapport with their hosts. The support we receive from them is an invaluable part of our ability to maintain our current high state of readiness. I have no recommendations for improving the current level of support.

MODIFICATION OF TOE FOR CENTCOM UNITS

QUESTION: Certain of your units are on troop lists for specific CENTCOM OPLANS. Have you given any consideration to modifying their Tables of Organization and Equipment (TOE's) or equivalent authorization documents to better adapt them for service in a desert environment?

ANSWER: No consideration has been given to modifying our unit structure. All Army National Guard units troop listed against CENTCOM OPLANS also have contingencies to support other OPLANS. Therefore, these units by design are structured with their mission equipment capable of operating in a variety of environments. Common Tables of Allowances and Technical Manuals provide unit commanders the authority to requisition certain unique items of clothing, tentage and mission support equipment or supplies based on the geographic area to which units will deploy. This approach permits standardization of unit structure while accommodating specific unit requirements based on geography.

MODIFICATION OF TOE FOR USCENTCOM

QUESTION: Certain of your units are on troop lists for specific USCENTCOM OPLANS. Have you given any consideration to modifying their Tables of Organization and Equipment (TOE's) or equivalent authorization documents to better adapt them for service in a desert environment?

ANSWER: No consideration has been given to modifying our unit structure. All USAR units troop listed against USCENTCOM OPLANS also have contingencies to support other OPLANS. Therefore, these units could be employed in more than one theater of operation. These units by design are structured with their mission equipment capable of operating in a variety of environments. Common Tables of Allowances and Technical Manuals provide unit commanders the authority to requisition certain unique items of clothing, tentage and mission support equipment or supplies based on the geographic area to which units will deploy. This approach permits standardization of unit structure while accommodating specific unit requirements based on geography.

MARINE CORPS RESERVE

QUESTION: Certain of your units are on troop lists for specific CENTCOM OPLANS. Have you given any consideration to modifying their Tables of Organization and Equipment (TOE's) or equivalent authorization documents to better adapt them for service in a desert environment?

ANSWER: One of the roles of the Marine Corps Reserve is to augment and/or reinforce active forces upon mobilization. Depending upon the scenario, reserve units may in fact be assigned to a command which is committed to CENTCOM operations.

Marine Corps commands, active and reserve, train for worldwide committments. Preparations for combat in a desert environment is part of that training. Unit tables of organization and equipment are not tailored to requirements for combat in specific areas of the world. Rather, upon mission assignment, a Marine Air Ground Task Force (MAGTF) is task organized with specific units and/or equipment required for mission accomplishment. This flexibility is one of the major strengths of the Marine Corps' MAGTF concept.

DESERT ENVIRONMENT

QUESTION: Certain of your units are on troop lists for specific CENTCOM OPLANS. Have you given any consideration to modifying their Tables of Organization and Equipment (TOE's) or equivalent authorization documents to better adapt them for service in a desert environment?

ANSWER: At the present time we are not aware of any action to change any of our equipment authorization for service in a desert environment.

QUESTION: Certain of your units are on troop lists for specific CENTCOM OPLANS. Have you given any consideration to modifying their Tables of Organization and Equipment (TOE's) or equivalent authorization documents to better adapt them for service in a desert environment?

ANSWER: The gaining Major Commands of Air National Guard units tasked in CENTCOM OPLANS include desert type equipment in tables of allowances for Air Force units. The Air National Guard participates in this process by ensuring that these tables of allowances are made applicable to ANG units.

DESERT CAMOUFLAGE UNIFORMS FOR CENTCOM UNITS

QUESTION: What provisions have been made to provide those of your units on troop lists for CENTCOM OPLANS with desert camouflage uniforms?

ANSWER: The requirements to provide desert camouflage uniforms to CENTCOM units is a Forces Command (FORSCOM) responsibility. FORSCOM has approximately 173,000 sets of desert camouflage uniforms for all CENTCOM troop listed units (includes Army National Guard CENTCOM units). These assets are stored at selected mobilization installations.

QUESTION: What provisions have been made to provide those of your units on troop lists for CENTCOM OPLANS with desert camouflage uniforms?

ANSWER: All requirements for the desert camouflage uniform have been identified in US Army Forces Command operational project stocks and O&M funded contingency stocks. The Army Reserve requirements for the desert camouflage uniform are included.

MARINE CORPS RESERVE

QUESTION: What provisions have been made to provide those of your units on troop lists for CENTCOM OPLANS with desert camouflage uniforms?

ANSWER: Upon mobilization units from the Marine Corps Reserve may be assigned to augment and/or reinforce commands with a CENTCOM commitment. Specialized equipment for use in particular areas of the world, such as desert camouflage uniforms, may be prepositioned, held in organic logistic units or drawn from central supply bases. It is the responsibility of the gaining command who has been assigned the mission to ensure units, active and reserve, are properly equipped.

DESERT CAMOUFLAGE

QUESTION: What provisions have been made to provide those of your units on troop lists for CENTCOM OPLANS with desert camouflage uniforms?

ANSWER: TA 016B currently authorizes four desert camouflage uniforms for personnel with duty requirement to CENTCOM. Uniforms are requisitioned as soon as RDF tasking is flowed to the units.

QUESTION: What provisions have been made to provide those of your units on troop lists for CENTCOM OPLANS with desert camouflage uniforms?

ANSWER: Air Force Table of Allowance (TA) 016 includes desert camouflage uniforms and is applicable to CENTCOM tasked ANG units. As major commands publish supporting plans to CENTCOM OPLANS, ANG units which are tasked establish their requirements for the desert camouflage uniforms and process their budgetary requests for annual funding.

DESERT CAMOUFLAGE UNIFORM STORAGE

QUESTION: Please explain with specificity how your CENTCOM tasked units will be issued desert camouflage uniforms, identifying the locations and quantities of present stocks of these uniforms and procedures for ensuring that rapidly mobilizing units are properly equipped before departing the continental United States for CENTCOM operational areas.

ANSWER: Command of Army National Guard (ARNG) units is transferred to Forces Command (FORSCOM) upon mobilization. Issue of desert camouflage uniforms to ARNG CENTCOM units is a FORSCOM responsibility and will be accomplished at the respective mobilization station. Present stocks of desert camouflage uniforms (including ARNG requirements) are listed below by mobilization station:

Fort Hood, Texas	20,000
Fort Lewis, Washington	1,500
Fort Sill, Oklahoma	6,500
Fort Stewart, Georgia	33,000
Fort Eustis, Virginia	4,000
Fort Campbell, Kentucky	48,000
Fort Bragg, North Carolina	57,000
Fort Bliss, Texas	3,000
TOTAL	173,000

ISSUE OF CAMOUFLAGE UNIFORMS

QUESTION: Please explain with specificity how your CENTCOM tasked units will be issued desert camouflage uniforms, identifying the locations and quantities of present stocks of these uniforms and procedures for ensuring that rapidly mobilizing units are properly equipped before departing the continental United States for CENTCOM operational areas.

ANSWER: The following is a list of mobilization stations and quantities where present stocks of desert camouflage uniforms for Army forces, including Army Reserve, are located:

Fort Hood, Texas	20,000
Fort Lewis, Washington	1,500
Fort Sill, Oklahoma	6,500
Fort Stewart, Georgia	33,000

Fort Eustis, Virginia	4,000
Fort Campbell, Kentucky	48,000
Fort Bragg, North Carolina	57,000
Fort Bliss, Texas	3,000
	173,000

There is an ongoing program to procure the required desert camouflage uniforms. When additional stocks of these uniforms have been procured, they will also be prepositioned at the mobilization stations for units that are troop listed for CENTCOM OPLANS. Personnel will be issued materiel at the mobilization station that is appropriate for the geographical area for which deployment is scheduled.

MARINE CORPS RESERVE

QUESTION: Please explain with specificity how your CENTCOM tasked units will be issued desert camouflage uniforms, identifying the locations and quantities of present stocks of these uniforms and procedures for ensuring that rapidly mobilizing units are properly equipped before departing the continental United States for CENTCOM operatonal areas.

ANSWER: The Marine Corps is procuring desert camouflage uniforms to support two Marine Amphibious Forces (MAF's). A MAF's allocation is distributed among the active forces, while the remaining MAF's equivalent is divided into thirds. One third is stored at the Defense General Supply Center in Richmond, Virginia, and the other two thirds are stored at the Defense Depot, Tracy, California for association with the maritime prepositioning ship (MPS) equipment sets. Augmenting and reinforcing SMCR units designated for CENTCOM will be issued camouflage uniforms from their gaining command's allocation.

DESERT CAMOUFLAGE UNIFORM

QUESTION: Please explain with specificity how your CENTCOM tasked units will be issued desert camouflage uniforms, identifying the locations and quantities of present stocks of these uniforms and procedures for ensuring that rapidly mobilizing units are properly equipped before departing the continental United States for CENTCOM operational areas.

ANSWER: TA 016B currently authorizes four desert camouflage uniforms for personnel with duty requirement to CENTCOM. Uniforms are requisitioned as soon as RDF tasking is flowed to the units. Air Force Clothing and Textile Office controls the locations and quantities of present stocks of desert camouflage uniforms. Normal requisitioning procedures by tasked units exist to provide equipment and supplies during mobilization and deployment of Air Force Reserve Forces.

QUESTION: Please explain with specificity how your CENTCOM tasked units will be issued desert camouflage uniforms, identifying the locations and quantities of present stocks of these uniforms and procedures for ensuring that rapidly mobilizing units are properly equipped before departing the continental United States for CENTCOM operational areas.

ANSWER: As units are equipped with desert camouflage uniforms, they store these uniforms with other mobility equipment and mobility bags in designated home station storage locations. Procedures for rapid issue of the uniforms are included in each unit's mobility plan. Specifically, units establish an issue station in either the unit mobility assembly area or the mobility out-processing line to issue mobility bags and camouflage uniforms (if not already incorporated into the mobility bags). Specific quantities of desert camouflage uniform currently on hand at ANG unit locations are as follows:

Unit/Location	On-hand
234CCS Haywood ANG Station, CA	165 sets
254CCG Garland, TX	100 sets
282CCS Coventry, RI	105 sets

EQUIPMENT FOR CENTCOM UNITS DESERT OPERATIONS

QUESTION: What steps have been taken to identify CENTCOM troop listed units' requirements for such items as: desert camouflage screens; lister bags; canteens; 5 gallon water cans; water trailers; water tank trucks; water purification equipment; etc.

ANSWER: This is a Forces Command (FORSCOM) responsibility. Army National Guard (ARNG) CENTCOM troop listed units' requirements are contained in FORSCOM operational Project No. FOR-X-03-83-A. All CENTCOM troop listed units' desert environment operational requirements, including those of the ARNG, are supported by the portion of Total Army appropriations which fund FORSCOM operations.

CENTCOM EQUIPMENT REQUIREMENTS

QUESTION: What steps have been taken to identify CENTCOM troop listed units' requirements for such items as: desert camouflage screens; lister bags; canteens; 5 gallon water cans; water trailers; water tank trucks; water purification equipment; etc?

ANSWER: Equipment for Army Reserve units that are troop listed for CENTCOM were identified as part of the planning process to develop requirements to support CENTCOM operation plans. Water support equipment requirements for Fiscal Year 1982 funded delivery period have been authorized and are being procured under Phase I of an operational project. Phase II of the same project identifies and authorizes procurement of similar equipment to be delivered in the Fiscal Year 1987 funded delivery period.

MARINE CORPS RESERVE

QUESTION: What steps have been taken to identify CENTCOM troop listed units' requirements for such items as: desert camouflage screens; lister bags; canteens; 5 gallon water cans; water trailers; water tank trucks; water purification equipment, etc.?

ANSWER: Upon mobilization units from the Marine Corps Reserve may be assigned to augment and/or reinforce commands with a CENTCOM commitment. Specialized equipment for use in particular areas of the world, such as desert camouflage screens, etc., may be prepositioned, held at organic logistic units or drawn from central supply bases. It is the responsibility of the gaining command to acquire appropriate additional equipment required for specific areas of operation.

DESERT EQUIPMENT

QUESTION: What steps have been taken to identify CENTCOM troop units' requirements for such items as: desert camouflage screens; lister bags; canteens; 5 gallon water cans; water trailers; water tank trucks; water purification equipment; etc.?

ANSWER: Normal procedure provides that the gaining command identifies mobility requirements to Headquarters Air Force Reserve and the equipment lists are then forwarded to the appropriate units.

QUESTION: What steps have been taken to identify CENTCOM troop listed units' requirements for such items as: desert camouflage screens; lister bags; canteens; 5 gallon water cans; water trailers; water tank trucks; water purification equipment; etc.?

ANSWER: CENTCOM, and in particular HQ Tactical Air Command and CENTAF have identified requirements for water related items to support units tasked in CENTCOM OPLANS. These requirements have been partially funded, and some items are already prepositioned at designated areas. Portions of the total identified requirements for water related equipment which have been prepositioned include such items as portable demineralized water purification units, well completion kits, 20,000 gallon water bladders, water tank trailers, and 3000 gallon water tanks. Canteens are part of the equipment in the standard Air Force Mobility "A" bag for all Air Force personnel tasked in any OPLAN including CENTCOM OPLANS. Five gallon water cans and 500 gallon water trailers are part of the standard equippage for Air Force Combat Communication units with a mobility requirement in Air Force OPLANS including CENTCOM OPLANS.

CAMOUFLAGE PAINTING

QUESTION: What provisions have been made to repaint CENTCOM Troop listed units' vehicles in desert camouflage paint before deployment to the CENTCOM area of operations?

ANSWER: The Army National Guard has made no provisions for repainting vehicles before deployment to the CENTCOM area of operations. Repainting these vehicles becomes a Forces Command requirement when the units are mobilized.

QUESTION: What provisions have been made to repaint CENTCOM troop listed units' vehicles in desert camouflage paint before deployment to the CENTCOM area of operations?

ANSWER: No specific provisions have been made to repaint vehicles in desert camouflage paint before deployment to the CENTCOM area of operations. All Army Reserve units troop listed against CENTCOM OPLANS also have contingencies to support other OPLANS.

MARINE CORPS RESERVE

QUESTION: What provisions have been made to repaint CENTCOM troop listed units' vehicles in desert camouflage paint before deployment to the CENTCOM area of operations?

ANSWER: Of the total Table of Equipment authorized, Marine Corps Reserve units hold approximately 45% as a Training Allowance. The remainder of the units equipment is held in a protected status in the stores system at the Marine Corps Logistics

Bases (MCLB) Albany, Georgia and Barstow, California. Upon mobilization, the equipment held by the units and the equipment held in the stores system will be shipped to the units' Stations of Initial Assignment where the units' vehicles will be prepared for the area of operations to which the unit will be deployed.

PAINTING VEHICLES

QUESTION: What provisions have been made to repaint CENTCOM troop listed units' vehicles in desert camouflage paint before deployment to the CENTCOM area of operation?

ANSWER: Air Force Reserve units will not deploy with their own vehicles.

QUESTION: What provisions have been made to repaint CENTCOM troop listed units vehicles in desert camouflage paint before deployment to the CENTCOM area of operations?

ANSWER: The decision to paint equipment in the desert scheme is directed by the major commands in their supporting plans to CENTCOM OPLANS. As supporting plans are published and when normal equipment painting is scheduled, ANG units repaint equipment with desert camouflage as directed by their gaining major command.

SUPPORT FOR CENTCOM UNIT DESERT OPERATIONS

QUESTION: Please explain what extra resources have been supplied (in terms of financial support and/or items of equipment) to better adapt CENTCOM troop listed units for operation in a desert environment.

ANSWER: The Army National Guard (ARNG) has not supplied any financial support or items of equipment to CENTCOM troop listed units for operation in a desert environment. Forces Command has the responsiblity to provide this support. The ARNG budgets to provide all early deploying ARNG units with all necessary cold weather clothing and equipment, chemical defense equipment and all other authorized organizational clothing and equipment.

EXTRA RESOURCING OF CENTCOM USAR UNITS

QUESTION: Please explain what extra resources have been supplied (in terms of financial support and/or items of equipment) to better adapt CENTCOM troop listed units for operation in a desert environment.

ANSWER: The Army Reserve has not specifically supplied any financial support or items of equipment to CENTCOM units for operation in a desert environment. There are, however, common items of equipment already issued to troop program units which may be used in CENTCOM or other operational areas designated for participation by Army Reserve units. Forces Command has the responsibility to provide this support, and in conjunction with Department of the Army, has taken action to procure specialized stock.

MARINE CORPS RESERVE

QUESTION: Please explain what extra resources have been supplied (in terms of financial support and/or items of equipment) to better adapt CENTCOM troop listed for operation in a desert environment?

ANSWER: Unit Tables of Equipment (T/E) are not tailored to requirements for combat in specific areas of the world. Upon mission assignment, a Marine Air Ground Task Force (MAGTF) is task organized to perform the assigned mission with its standard T/E and is augmented by certain items of equipment tailored for the area of operation in which the mission is to be performed, i.e., desert camouflage uniforms for desert operations. Resources for the acquisition of equipment required in desert operations is incorporated in Marine Corps logistics programming and the FY-1985 Budget.

RESOURCES FOR OPERATION IN A DESERT

QUESTION: Please explain what extra resources have been supplied (in terms of financial support and/or items of equipment) to better adapt CENTCOM troop listed units for operation in a desert environment?

ANSWER: No extra resources have been provided to Air Force Reserve units with CENTCOM tasking other than normal O&M requirements.

QUESTION: Please explain what extra resources have been supplied (in terms of financial support and/or items of equipment) to better adapt CENTCOM troop listed units for operation in a desert environment.

ANSWER: As tables of allowances are modified and major command OPLANS are published to support CENTCOM OPLANS, Air National Guard units which are tasked are given first priority in the equippage, budgetary, and funding process.

DESERT TRAINING CENTCOM UNITS

QUESTION: Have your CENTCOM troop listed units undergone any specific training for desert combat, operations, and survival differing from training normally received by all units?

ANSWER: Roundout (RO) battalions of the Army National Guard (ARNG) commenced participation in the National Training Center (NTC) Roundout Rotation program in late FY 83. ARNG units participate with the Active Component Division with which they are affiliated. The first unit to undergo this training was 1-108 Armor Battalion, Georgia ARNG, a RO unit to the 24th Infantry Division. Training at the NTC is conducted in a demanding and unforgiving desert environment against a well trained aggressive opposing force.

CENTCOM SPECIFIC MISSION TRAINING

QUESTION: Have your CENTCOM troop listed units ungergone any specific training for desert combat, operations, and survival differing from training normally received by all units?

ANSWER: Information from United States Army Forces Command (FORSCOM) indicates that Army Reserve units on CENTCOM troop lists have not received any specific training for desert combat, operations and survival that differs from training normally received by other units.

MARINE CORPS RESERVE

QUESTION: Have your CENTCOM troop listed units undergone any specific training for desert combat, operations and survival differing from training normally received by all units?

ANSWER: Marine Corps units, active and reserve, train for world wide commitments. A portion of this training deals with desert combat. The Marine Corps Air Ground Combat Center, located at Twentynine Palms, California, is a training facility which is ideally suited to preparing units for combat in a desert environment. Training plans provide for two Reserve battalions, along with appropriate supporting units, to annually train at this facility in combined arms exercises (CAX's).

TRAINING FOR DESERT COMBAT

QUESTION: Have your CENTCOM troop listed units undergone any specific training for desert combat, operations, and survival differing from training normally received by all units?

ANSWER: The one tactical airlift unit and some associated support units tasked under existing CENTCOM plans, have participated in RDF training exercises: BRIGHT STAR 82 and RED FLAGS 82-4 and 83-4.

QUESTION: Have your CENTCOM troop listed units undergone any specific training for desert combat, operations, and survival differing from training normally received by all units?

ANSWER: CENTCOM tasked ANG units, like other ANG units, are involved with OCONUS deployments and exercises which are oriented toward their theater of employment. This includes training JCS exercises such as Bright Star and Accurate Test in the CENTCOM Area of Responsibility (AOR). Within the CONUS, CENTCOM tasked units, including ANG, participate regularly (approximately seven times per year) in exercises built specifically for the CENTCOM AOR. These include six Quick Force exercises of 3 to 4 day duration and a 10 to 14 day CENTCOM sponsored exercise. The exercise scenarios include elements of desert combat operations. Further, there is a CENTCOM oriented Red Flag scenario annually at Nellis AFB. This exercise includes desert survival.

ISSUE OF EQUIPMENT TO CENTCOM UNITS

QUESTION: What provisions have been made to ensure that your CENTCOM troop listed units receive issue of the new Kevlar helmets and protective vests before deployment to the CENTCOM area of operations?

ANSWER: The Kevlar helmet is being fielded by unit in a Department of Army Master Priority List (DAMPL) sequence. The Army National Guard (ARNG) will receive 3,500 helmets for 13 units in FY 84 and approximately 10,000 helmets in FY 85. Since CENTCOM units are among the highest priority units in the ARNG, they will be among the first units to receive the Kevlar helmet.

The Kevlar protective armor replaces the present body armor and is being provided on an "as required" basis. The

National Guard Bureau position is that the higher priority units receive the new Kevlar protective armor and transfer the current armor to lower priority units. Due to the high cost of the Kevlar protective armor, this phase-in will be accomplished over a period of years as funds can be programmed.

KEVLAR HELMETS

QUESTION: What provisions have been made to ensure that your CENTCOM troop listed units receive issue of the new Kevlar helmets and protective vests before deployment to the CENTCOM area of operations?

ANSWER: Headquarters, Department of the Army distribution plans take into consideration those units most likely to be deployed early. In the case of the Kevlar helmets and protective vests, the distribution plan equips high priority CENTCOM troop listed units first. The plan lists all CENTCOM units, including Reserve Components.

MARINE CORPS RESERVE

QUESTION: What provisions have been made to ensure that your CENTCOM troop listed units receive issue of the new Kevlar helmets and protective vests before deployment to the CENTCOM area of operations? (Air Force components, do not answer this question).

ANSWER: The Marine Corps is presently procuring the new Kevlar helmets and protective vests for the total force. If deployment to CENTCOM or any other area of operation is required prior to completion of procurement and fielding of these items, available assets will be issued on a priority basis to active or reserve units dependent upon their deployment requirements and expected level of commitment.

WEAPONS ISSUE TO CENTCOM UNITS

QUESTION: What provisions have been made to ensure that your CENTCOM troop listed units receive issue on a preferential basis of M249 Squad Automatic Weapons, M16A2 rifles, MK19-3 automatic grenade launchers, Stingers, or other weapons.

ANSWER: The Army National Guard (ARNG) CENTCOM units are some of the highest priority units in the ARNG and consequently enjoy a high position on the Department of the Army Master Priority List (DAMPL), the document used to determine which claimants, (Active or Reserve Component) receive equipment first. Essentially, this equipping procedure is "first to fight is first to be equipped". These CENTCOM units are filled to 100 percent of documented requirements for modern equipment, as well as other common and support equipment in accordance with the established logistics priorities (consistent with DAMPL).

PREFERENTIAL ISSUE OF EQUIPMENT

QUESTION: What provisions have been made to ensure that your CENTCOM troop listed units receive issue on a preferential basis of M249 Squad Automatic Weapons, M16A2 rifles, MK19-3 automatic grenade launchers, Stingers, or other weapons?

ANSWER: The Army remains committed to the policy that units scheduled to "Fight First" will be equipped first. The Department of the Army Master Priority List ensures that units that are first to fight are equipped first. Therefore, the Army Reserve CENTCOM troop listed units will receive the same priority of issue as the Active force for Squad Automatic Weapons, M16A2 rifles, etc. when committed to support a CENTCOM OPLAN.

MARINE CORPS RESERVE

QUESTION: What provisions have been made to ensure that your CENTCOM troop listed units receive issue on a preferential basis of M249 Squad Automatic Weapons, M16A2 rifles, MK 19-3 automatic grenade launchers, Stingers, or other weapons?

ANSWER: As the Nation's Force in Readiness, the Marine Corps must be prepared for world wide commitments. As such, equipment modernization efforts in the Marine Corps are of the utmost importance, and are directed at increasing and improving the tactical mobility and firepower of all Marine Corps forces to include the 4th MarDiv/4th MAW/4th FSSG. Current Marine Corps policy, derived from the total force concept, dictates that equipment requirements for reserve and regular forces be determined in concert. Specific items, such as the M249 SAW, M16A2 Rifle, and MK19-3 Automatic Grenade Launcher, are being fielded in reserve units and active units in essentially the same time period.

If mobilization of Reserve units for a CENTCOM commitment or any other operation occurs prior to completion of procurement, and fielding, available assets will be issued on a priority basis to active or reserve units dependent upon their deployment requirements and expected level of commitment.

RESOURCE SHORTCOMINGS FOR CENTCOM UNITS

QUESTION: Do you have any recommendations for correcting any equipment, supply, maintenance, training, personnel or financial shortcomings you may be aware of in your CENTCOM troop listed units?

ANSWER: The only recommendation I have is for Congress to provide as much support as possible for the Total Army portions of the President's Budget Request for the Department of Defense. We are managing the Army National Guard CENTCOM units to my satisfaction. Army National Guard CENTCOM units have been assigned high priority on the Department of Army Master Priority List. This means that requirements for equipment and resources for supplies maintenance, training, and personnel are provided to CENTCOM units prior to the requirements of units with a lower priority and is in concert with the policy that the first units to fight are the first to be equipped.

GUARD AND RESERVE FY 1985 BUDGET

QUESTION: Do you have any recommendations for correcting any equipment, supply, maintenance, training, personnel,or financial shortcomings you may be aware of in your CENTCOM troop listed units?

ANSWER: Equipment shortages within the CENTCOM (USAR) force though serious are not insurmountable. Past and future examination of critical shortages present in most units, show that only one, two or three items are short. If these items are obtained, the units in question will be in a posture allowing deployability in accordance with the C-3 or better criteria.

Shortages of enlisted personnel and senior NCOs in certain MOSs continue to be a problem. Emphasis toward maintaining enlistment/reenlistment bonuses will help alleviate this problem.

Lack of training time and the proximity of training areas is also a problem plaguing some reserve units. Utilization of full-time personnel (Full-Time Manning and Military Technicians) alleviates the time spent for administrative duties and training preparaton which allows the unit personnel to devote more time to meaningful training.

MARINE CORPS RESERVE

QUESTION: Do you have any recommendations for correcting any equipment, supply, maintenance, training, personnel, or financial shortcomings you may be aware of in your CENTCOM troop listed units?

ANSWER: As the nation's force in readiness, the total Marine Corps trains for world wide commitments. The highest state of combat readiness possible in all units is of the utmost importance. Resources required for this readiness have been identified and are embodied in the proposed budget for Fiscal Year 1985.

SHORTCOMINGS IN CENTCOM UNITS

QUESTION: Do you have any recommendations for correcting any equipment, supply, maintenance, training, personnel, or financial shortcomings you may be aware of in your CENTCOM troop listed units?

ANSWER: We are continually working with gaining commands to develop exercises simulating desert environment requiring use of desert equipment and uniforms.

SHORTCOMINGS IN CENTCOM UNITS

QUESTION: Do you have any recommendations for correcting any equipment, supply, maintenance, training, personnel, or financial shortcomings you may be aware of in your CENTCOM troop listed units?

ANSWER: The current equippage and funding are adequate to support Air National Guard units tasked in CENTCOM OPLANS.

QUESTION: Soviet doctrine stresses carrying combat to the full depth of the battlefield. Considering the full spectrum of combat capabilities their doctrine states they will employ behind our front lines, including everything from the so-called "air operation" to airborne landings, airmobile operations, Operational Maneuver Groups (OMG's), and spetznaz operations, our combat support and combat service support units will be facing a rear area security problem of unprecedented severity and intensity. Have any steps been taken to alter the Tables of Organization and Equipment (TOE's) or equivalent authorization documents to increase these units' combat capabilities to deal with this very significantly enhanced threat?

ANSWER: Tables of Organization and Equipment for military police (MP) units have been modified to better enable them to defeat the forces they are likely to encounter in performance of their portion of the Rear Area Protection (RAP) mission. Within their respective areas, division, corps, or communications zone MP units provide Rear Area Combat Operations (RACO) support and response forces in order to defeat Level I (agents, sympathizers, and terrorists) and Level II (tactical units of less than battalion size) enemy forces. For Level III (enemy units of battalion size or larger) threats the echelon commander allocates combat units to handle enemy activities beyond the capability of MP forces. The organization and equipment of other combat support and combat service support organizations are also being examined in order to determine the changes required to increase their ability to adequately defend their bases and personnel against enemy forces inserted into the rear area, while minimizing impact upon their capability to train for and perform their primary support missions.

MARINE CORPS RESERVE

QUESTION: Soviet doctrine stresses carrying combat to the full depth of the battlefield. Considering the full spectrum of combat capabilities their doctrine states they will employ behind our front lines, including everything from the so-called "air operation" to airborne landings, airmobile operations, Operational Maneuver Groups (OMB's), and spetznaz operations, our combat support and combat service support units will be facing a rear area security problem of unprecedented severity and intensity. Have any steps been taken to alter the Tables of Organization and Equipment (TOE's) or equivalent authorization documents to increase these units' combat capabilities to deal with this very significantly enhanced threats?

ANSWER: The Marine Corps has the unique capability to organize Marine Air-Ground Task Forces (MAGTF) for combat. MAGTF's are a combined Ground/Air combat force that takes maximum advantage of the combat potential inherent in a closely integrated air-ground team, under the direction and control of a single commander. MAGTF commanders organize and maneuver their forces based on the mission and threat. Accordingly, the assets in a MAGTF can be deployed and employed to reinforce likely areas of attack to include rear areas.

Also it should be noted that the rear area of an amphibious operation would be in close proximity to the beach. Therefore, in addition to task organization of Marine Forces, naval gunfire support and aviation protection from the Fleet could also be used in the security of rear areas.

DISTRIBUTION OF TOW, DRAGON, STINGER AND MK-19

QUESTION: Are you aware of any plans to provide your combat support and combat service support units with such weapons as TOW's, Dragons, Stingers, or MK19-3 automatic grenade launchers, if these units do not already have these or equivalent weapons listed in their authorization documents?

ANSWER: Distribution of TOWs, Dragons, Stingers or MK-19 (40mm Grenade Machine Gun) is not currently scheduled for Combat

Support (CS) or Combat Service Support (CSS) units of the Army National Guard. TOWs are required only in Combat units. Dragons and MK-19s are required in some CS and CSS units but availability of these weapons systems precludes issuance to other than Combat units. The Stinger is required only in Combat units and Air Defense Artillery units.

EQUIPMENT CHANGES FOR CENTCOM USAR UNITS

QUESTION: Are you aware of any plans to provide your combat support and combat service support units with such weapons as TOWs, Dragons, Stingers, or MK19-3 automatic grenade launchers, if these units do not already have these or equivalent weapons listed in their authorization documents?

ANSWER: These items are not presently authorized in current Army Reserve authorization documents. At present there are no plans to equip the Army Reserve combat support and combat service support units with the TOW, Dragon or Stinger weapons nor the MK19-3 automatic grenade launchers. The MK19-3 is currently undergoing testing. These items are only issued to combat units. However, our combat units are on distribution for the TOW and Dragon systems through Fiscal Year 1988.

MARINE CORPS RESERVE

QUESTION: Are you aware of any plans to provide your combat support and combat service support units with such weapons as TOW's, Dragons, Stingers, or MK19-3 automatic grenade launchers, if these units do not already have these or equivalent weapons listed in their authorization documents?

ANSWER: While not resident in combat service support units, weapon systems such as TOW, Dragon, and Stinger are available for employment within the Marine Air Ground Task Force (MAGTF). It is the responsibility of the MAGTF Commander to organize his forces to protect against the threat and accomplish his mission.

HMMWV DELIVERY SCHEDULES

QUESTION: Which of your units are scheduled to receive High Mobility Multi-Purpose Vehicles and on what delivery schedules?

ANSWER: Headquarters, Department of the Army has provided the National Guard Bureau information on distribution of the High Mobility Multi-Purpose Wheel Vehicle (HMMWV), consolidated as all body types (ABT), as follows:

FY 85	FY 86	FY 87	FY 88	FY 89	FY 90
150	737	1272	1448	4481	2692

Distribution of the HMMWV to specific units is dependent upon the body type required for these units. Presently, a distribution plan (by specific body type) for the HMMWV has not been provided to the ARNG. When this distribution plan is provided by the Deputy Chief of Staff for Operations (DCSOPS), Department of the Army, distribution of the HMMWV by body type to ARNG recipients can be accomplished.

HIGH MOBILITY MULTI-PURPOSE WHEELED VEHICLE ISSUE

QUESTION: Which of your units are scheduled to receive High Mobility Multi-Purpose Vehicles and on what delivery schedules?

ANSWER: Current projections call for the Army Reserve to receive 4,266 High Mobility Multi-Purpose Wheeled Vehicles (HMMWV) by the end of FY 90. Proposed distribution plans, developed by US Army Forces Command, are being finalized. However, 3,007 vehicles will be distributed as follows:

TYPE UNIT	QUANTITY OF VEHICLES	FISCAL YEAR
M966 TOW Missile Carrier		
Infantry Battalions	108	2 - 3Q FY 85
		106 - 1Q FY 87
M996 Ambulance		
Engineer Companies and Detachments	16	10 - 3Q FY 85
		2 - 1Q FY 86
		2 - 2Q FY 86
		1 - 3Q FY 86
		1 - 4Q FY 86
Infantry Battalions	9	4Q FY 85
M997 Ambulance		
Ambulance Companies	253	180 - 1Q FY 88
		73 - FY 89
Field Artillery Battalions and Batteries	70	2 - 1Q FY 88
		68 - FY 89
Aviation Maintenance Company	1	FY 89
M998 Utility Truck		
Engineer Companies	1,644	FY 89
Field Artillery Batteries	413	6 - 2Q FY 85
		13 - 1Q FY 86
		1 - 2Q FY 86
		393 - FY 89
Combat Support (Maintenance) Companies	132	10 - 2Q FY 86
		7 - 3Q FY 86
		8 - 4Q FY 86
		107 - FY 89
Ambulance Companies	83	11 - 3Q FY 86
		72 - FY 89
Chemical Detachments	6	2 - 2Q FY 86
		4 - FY 89
Military Police Companies	3	FY 89
Armored Cavalry Troops	24	FY 89
Infantry Battalions	84	FY 89
M1025 Armament Carrier		
Military Police Companies and Detachments	99	FY 89
Field Artillery Battalions	48	FY 89
Armored Cavalry Troops	14	FY 89

MARINE CORPS RESERVE

QUESTION: Which of your units are scheduled to receive High Mobility Multi-Purpose Wheeled Vehicles and on what delivery schedules?

ANSWER: The High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) is the replacement vehicle for all M151 Gamma Goats, M792 & M718 ambulances, and all 1/4 and 1 1/4 ton general purpose cargo trailers currently in the Marine Corps inventory. The HMMWV will be distributed to 4th Marine Division, 4th Marine Aircraft Wing, and 4th Force Service Support Group units as well as the active force. Reserve fielding will begin in March 1985 with 50 vehicles. These vehicles will provide initial capability for reserve training and familiarization with the HMMWV. Reserve units will receive additional vehicles from programmed FY85, 86 and 87 procurements. Reserve fielding will be completed by FY87.

SINCGARS-V DELIVERY SCHEDULES

QUESTION: Which of your units are scheduled to receive SINCGARS-V radios and on what delivery schedules?

ANSWER: The following Army National Guard (ARNG) units are scheduled to receive SINCGARS-V radios in the year indicated. ARNG Roundout units will receive the radios simultaneously with their Active Component parent unit.

	1987	1988	1989	1990
2-252 Armor Battalion (Roundout to the 2nd Armor Division)	X			
155 Armor Brigade (Roundout to the 1st Cavalry Division)		X		
3-141 Infantry Battalion (Mechanized) (Roundout to the 1st Cavalry Division)		X		
1-803 Armor Battalion (Roundout to the 9th Infantry Division)			X	X
2-136 Infantry Battalion (Mechanized) (Roundout to the 1st Infantry Division)			X	X
256th Infantry Brigade (Mechanized) (Roundout to the 5th Infantry Division)			X	X
41st Infantry Brigade (Roundout to the 7th Infantry Division)			X	X
48th Infantry Brigade (Mechanized) (Roundout to the 24th Infantry Division)			X	X

DISTRIBUTION OF SINCGARS-V RADIOS TO THE ARMY RESERVE

QUESTION: Which of your units are scheduled to receive SINCGARS-V radios and on what delivery schedules?

ANSWER: Our roundout units supporting the 4th and 7th Infantry Divisions will receive SINCGARS-V radios in Fiscal Years 1989 and 1990. This distribution will be made as part of the distribution to the Active units in these divisions.

MARINE CORPS RESERVE

QUESTION: Which of your units are scheduled to receive SINCGARS-V Radios and on what delivery schedules?

ANSWER: The SINCGARS-V radio is programmed to be received by the Marine Corps Reserve in late FY91 or early FY92. It will be fielded in units of the 4th Marine Division, 4th Marine Aircraft Wing and 4th Force Service Support Group. Delivery schedules to individual units have not been developed at this time. Specific units which will receive the new radio are:

(1) 4th Marine Division
  a.Headquarters Battalion
  b.Infantry Regiment
  c.Artillery Regiment
  d.Combat Engineer Battalion
  e.Tank Battalion
  f.Amphibious Assault Battalion
  g.Communications Battalion

(2) 4th Marine Aircraft Wing
  a.Marine Wing Support Group

(3) 4th Force Service Support Group
  a.Headquarters and Service Battalion
  b.Maintenance Battalion
  c.Landing Support Battalion
  d.Engineer Support Battalion
  e.Motor Transport Battalion

EQUIPMENT ISSUES TO EARLY DEPLOYING UNITS

QUESTION: Please describe what plans exist, if any, to issue to your units, especially those with early mobilization dates (before D+30), the following weapons and equipment: MK19-3 automatic grenade launchers; M16A2 rifles; M249 Squad Automatic Weapons; Personal Defense Weapons (the new 9mm pistols); and the new Kevlar vests and helmets.

ANSWER: Army Modernization Information Memorandum (AMIM) distribution plans for issue to unit level of detail have been developed in Department of the Army Master Priority List (DAMPL) sequence for the Squad Automatic Weapons. Also, current plans are to distribute the MK19-3 Automatic Grenade Launcher to the 9th Infantry Division High Tech Light Division (HTLD) only; therefore, the 1-803 Armor Battalion, roundout to the 9th Infantry Division (HTLD) is the only ARNG unit currently scheduled to receive this equipment. There is currently no distribution plan for issue of the M16A2 rifle and 9mm pistols to ARNG units. Current plans are to issue Kevlar vests only as a fair wear and tear replacement item for the current on hand body armor. Kevlar helmets will be distributed in DAMPL sequence.

PLANNING FOR EQUIPMENT ISSUE

QUESTION: Please describe what plans exist, if any, to issue to your units, especially those with early mobilization dates (before D+30), the following weapons and equipment: MK19-3 automatic grenade launchers; M16A2 rifles; M249 Squad Automatic Weapons; Personal Defense Weapons (the new 9mm pistols); and the new Kevlar vests and helmets.

ANSWER: These items are not presently authorized in current Army Reserve authorization documents. The MK19-3 automatic grenade launcher, the M16A2 rifle and the 9mm automatic pistol are currently undergoing tests and no plans currently exist for issuing them to Army Reserve units. The M249 Squad Automatic Weapon will be issued in Fiscal Years 1988 and 1989. In the case of the Kevlar helmets and protective vests, the distribution plan equips high priority troop listed units first beginning Fiscal Year 1984.

MARINE CORPS RESERVE

QUESTION: Please describe what plans exist, if any, to issue to your units, especially those with early mobilization dates (before D+30), the following weapons and equipment: MK19-3 automatic grenade launchers; M16A2 rifles; M249 Squad Automatic Weapons; Personal Defense Weapons (the new 9mm pistols); and the new Kevlar vests and helmets.

ANSWER: The Marine Corps is presently procuring the above items for the total force with the exception of the personal defense weapons which are still undergoing testing. The priority for issue of this equipment for mobilization is accorded to those reserve units assigned early augmentation or reinforcement missions.

QUESTIONS SUBMITTED BY SENATOR RUDMAN

MANNING

Question: How many civilian technicians were hired in a "permanent" status during FY 1984?

Answer: Army N.G. 966 Air N.G. 1,732

Question: How many civilian technicians were hired in a "temporary indefinite" status during FY 1984?

Answer:
Temporary
Army N.G. 719 Air N.G. 530
Indefinite
Army N.G. 530 Air N.G. 28

Question: Why are you only requesting AGR authorizations?

Answer: The majority of the full-time support increase was requested for AGR authorizations because of the greater flexibility of this full-time support resource in this stage of the program growth. The Guard and Reserve need both AGR members and technicians, the priority for full-time military personnel in deploying units in the Army Guard and Reserve resulted in their FY 1985 request being only for AGR.

Question: Technicians are excluded from civilian DoD ceilings. Why do you use the established technician floor as a ceiling?

Answer: The Department supports the removal of legislative civilian personnel ceilings as they unnecessarily restrict management flexibility. While the requested growth in military technicians for FY 1985 is small, there is no intent to use the established floor as a ceiling.

Question: Do you believe a "mix" of AGRs and civilian technicians is proper? If so, what percentage of "mix"?

Answer: Yes. We need both AGR members and technicians to meet our full-time support requirements. There is no fixed percentage which is optimal. The mix decision is based on cost and readiness consideration. The FY 1985 request for the Army and Air Force Guard and Reserve would result in all overall mix of 60% technicians and 40% AGR.

ANG FLYING UNIT IN OREGON

QUESTION: We understand the Air N.G. has forecast an additional flying unit in the State of Oregon. Is this correct? Will the unit be manned by civilian technicians and AGRs? What will the precentage of mix be?

ANSWER: As a result of Air Force programming, the Air National Guard is becoming more self-sufficient in air defense and tactical fighter training. The 114th Tactical Fighter Training Squadron (TFTS) was activated at Kingsley Field, Oregon to accommodate this requirement. The squadron is under the 142nd Fighter Interceptor Group at Portland, which manages and provides operational support for the Kingsley Training activity.

Some ANG missions are better suited for AGR manning due to the military nature of the responsibilities involved. Among these is the 114 TFTS training mission. Accordingly, this training activity is currently manned with 83 percent AGR and 17 percent military technician.

The ANG's proposed mix of 75 percent technician/25 percent AGR is a program-wide goal, and would provide continuity and stability of full-time support programs in the ANG. The mix at specific units will vary according to mission, as is the case at the Kingsley Field training mission, where the majority manning is AGR. A typical flying unit manning, however, is about 85 percent technician and 15 percent AGR.

PROGRAM MANAGEMENT

Question: How many technicians converted in place?

Answer: There are a cumulative total of 1,644 technicians who converted in place in the Army National Guard. The Air National Guard has not kept records on the number of individuals who converted to AGR status in the same position.

Question: By letter dated 20 January 1984 (NGB Log #84-284) you put a stop to all in-place conversions effective 1 March 1984 and then on 10 February (via TWX 101445Z Feb 84) you informed all States that there would be no conversions "effective immediately." Why the sudden change in your approach re: in-place conversions?

Answer: The Air National Guard's decision to reverse its policy allowing technicians to change to AGR status in-place was not a "sudden change." Rather, this policy change evolved from a combination of Congressional guidance and requirements in executing the full-time programs. The authorized positions do not convert. This gives maximum flexibility to the local commanders with respect to where they may use their allocated technician and AGR resources. Early Congressional guidance (FY 82) indicated a direction to determine the functional areas in which each resource would be used. In order to achieve that end, the Air National Guard had to allow technicians in AGR functions to change to AGR status, thus freeing up technician resources that would then be used to hire technicians in technician functions. Because of subsequent guidance there is no longer a need to allow technicians to change to AGR status in-place in order to execute the program and achieve the programmed technician and AGR end strengths.

Question: Are civilian positions still being converted to AGR? If so, why?
Answer: Positions in the Air National Guard do not convert from one status to the other, nor have they "converted" in the past. With few exceptions, full-time positions may be filled by either technicians or AGR members. This allows selection of the best qualified member for a position, regardless of their status. It also provides maximum potential for upward mobility for both technicians and AGR personnel assigned to a unit. The only exception are positions such as recruiters, base career advisors, and weapon system security positions that may only be filled by AGR personnel. The Army National Guard is not converting civilian positions to AGR.

Question: Provide a breakdown, for the record, of these technicians' civilian grades/step; military rank; years of service; and marital status at the time of his/her conversion. (Include Army and Air N.G. during FY - 82, FY - 83, and FY - 84.)
Answer: Data is unavailable. States were not required to maintain this information during the conversion program which ended in FY 82 since it was not germane to management of the AGR-Conversion program.

ANG MILITARY DUTY PROGRAM

QUESTION: In accordance with NGB/MP letter dated 2 September 1983, Subject: Revised Policies, ANG Military Duty Program (with attachments), AGR personnel who hold military grades higher than the maximum allowable military duty grade for their full time positions must be reassigned to full time positions commensurate with their military grades. Who initiates the reassignment? Does the AGR individual have to be fully qualified for the new position? Is the reassignment accomplished through competition?
ANSWER: The referenced policy is designed to preclude the extended retention of AGR members whose military grade exceeds the maximum grade authorized for their assigned position. The policy is patterned after the civil service "save pay/save grade" provisions, and allows a limited period for the overgrade situation to be resolved. The ideal solution is to reassign the member to another position that is commensurate with his/her military grade. When this is not possible within the authorized time limit, then the member must be administratively demoted or removed from AGR status.

Reassignment of overgraded AGR members may be initiated by the member (by application for another vacancy), the commander, or by the Adjutant General.

ANG policy states that AGR personnel must have a minimum 3-skill level qualification for any position to which assigned. For cross-training or reassignment purposes, this is often more difficult for an AGR member than for a military technician; a technician can be selected for a new position in a "trainee" status and work toward a fully qualified status (the target grade) while assigned to the position.

Reassignment of overgraded AGR members may be accomplished through competition or through priority placement procedures (similar to the military technician program) that are established within the state.

UPWARD MOBILITY

QUESTION: Is the civilian employee's upward mobility hampered by AGRs? (Note) Obviously, civilian positions to which AGRs are reassigned will be of a higher grade than previously held--these reassignments thwart career progression of the civilian technician.

ANSWER: No; military technicians' upward mobility is not hampered by AGR members assigned to a unit in the Air National Guard.

Our full time positions may be filled by either military technicians or AGR personnel. This allows selection of the best qualified member for a position, regardless of his/her status. It also provides maximum potential for upward mobility for both military technicians and AGR members.

If a position is encumbered by an AGR member and is then vacated, that position is again available for fill by either another AGR member or a military technician. That decision would be based on who applies and is considered best qualified for the position, consistent with upward mobility and priority placement procedures established in the state.

MILITARY OVERGRADED

QUESTION: What percentage of AGRs are still overgraded militarily?

ANSWER: Approximately seven percent of the AGR members in the Air National Guard are currently overgraded for their assigned full-time position. The vast majority of these members were brought into the AGR program in the early stages of its development, before firm grade comparability policies were issued.

We are taking corrective action to reduce the number of overgraded AGR members. By 1 June 1986, those individuals must be reassigned to a position commensurate with their grade, be administratively reduced in grade, or be separated from AGR status.

We cannot provide a list, as requested, of AGR personnel reassigned to higher graded positions. We do not maintain records of either AGR personnel or military technicians who have been reassigned to higher graded positions since their initial assignment.

CAREER PROGRESSION

QUESTION: Is career progression, for the drilling reservist, being blocked by high graded AGRs?

ANSWER: No.

In order to become either a military technician or an AGR member in the Air National Guard (ANG), the person must first become a member of the ANG and be properly assigned to a Unit Manning Document (UMD) position. Selection for UMD positions and military advancement within the UMD structure is based on military consideration of who is best qualified and deserving of the promotion, regardless of the member's status (drilling reservist, military technician, AGR).

TECHNICIAN PROGRAM MANAGEMENT

QUESTION: All of the funds appropriated for civilian technicians in FY 83 were not used. Why?

ANSWER: In FY 1983, about $3 million in civilian pay compensation was not executed because of a hire LAG of 73 manyears and approximately $58 less in actual average salary than programmed. We will execute the FY 84 technician program as reflected in the FY 85 budget.

QUESTION: Were they transferred to some other account?

ANSWER: No. They lapsed and were returned to the United States Treasury.

MANPOWER AVAILABILITY/PRODUCTIVITY

Question: For the record. Is the following information correct?

AGR	Civilian Technician
30 day leave per year	accumulates 4 hours per pay period
unlimited sick leave	accumulates 4 hours per pay period
72 hour passes	N/A
20 year retirement - any age	Age 55 with 30 years service
CT for UTA attendance	N/A
CT for overtime	CT for overtime
5 hours PT per week	N/A
mandatory military schools	N/A

Answer: The following comparisons are more accurate:

AGR	Civilian Technician
Earn 30 days leave per year	Earn 4, 6 or 8 hours leave per pay period, based upon seniority, plus 15 days paid military leave per year
Can use leave in increments of no less than one day	Can use leave in increments of no less than 15 minutes
Unlimited sick leave	Earn 4 hours per pay period
Can earn 72 hour passes	Weekends and holidays included in leave periods not counted as leave
Retirement at any age after completion of 20 years active duty	Retirement at age 55 with 30 years of service or retirement at age 60 with 20 years of service. In certain

	cases may be eligible for discontinued service annuity at any age after 25 years of service or after age 50 with at least 20 years of service. Also entitled to a Reserve retirement at age 60 after 20 years of creditable Reserve service.
No pay for UTA attendance	Drill pay for UTA attendance
N/A	Comp time for overtime
Mandatory military schools	Mandatory military schools

There are obviously different rules that affect the comparative manpower availability for AGR members and civilian technicians. The AGR members, like all full-time duty members, are in a duty status 24 hours a day seven days a week. Limited manpower availability is not a problem for either AGR members or technicians. Both are necessary to provide needed full-time support for mission accomplishment.

COSTS

Question: AGR personnel are entitled to BAO, BAS and VHA. Is this correct?

Answer: AGR personnel have the same compensation and benefit entitlements as other active force personnel.

Question: Isn't it true that the AGR works for the State Adjutant General and does not have to PCS or participate in regular Army or Air Force promotion systems?

Answer: Section 504(c) of Public Law 98-94, the Department of Defense Authorization Act, 1984, included a requirement that the Secretary of Defense submit draft legislation to provide on a permanent basis that members of the National Guard serving in a full-time duty status for the purpose of organizing, administering, recruiting, instructing, or training the National Guard are under State control except when explicitly ordered to Federal service. AGR members other than those who are explicitly under State control and who are ordered to active duty under section 678 of title 10, United States Code may be detailed to duty as the Secretary concerned sees fit. Regular and Reserve officers on the active-duty list of their armed force are considered for promotion under procedures specified in chapter 36 of title 10, United States Code. AGR officers are not on an active-duty list. They are one of several categories of officers specifically excluded from chapter 36 procedures in accordance with section 641 of that chapter. AGR officers are, therefore, considered for promotion under procedures specified in the Reserve Officer Personnel Act, as amended.

Question: Isn't it true that the AGR will continue to live in his local community and will collect the VHA?

That he will never have to transfer out of his community.

Answer: As indicated above, the AGR member of the National Guard is under State control. Thus it is possible that his or her assignments would remain within State boundaries. Different rules apply to members of the Reserve. It should be noted that stability is one objective of the full-time support program, therefore it is desirable both for AGR members and technicians.

Question: Isn't the average AGR take home pay higher than that of the average technician?

Answer: Comparative pay between AGR members and technicians is dependent upon comparative grade structure. In the Air National Guard, for example, technicians wage grade salaries in the maintenance area are generally higher than salaries for comparable AGR grades.

Question: Isn't the entire technician income taxable while the AGR's is not?

Answer: No. To make an accurate comparison between AGR and technician income, the income of the technician from his or her Guard or Reserve military duties must also be included and, as with other Guard and Reserve members, portions of this income are not taxable.

Question: Does the civilian technician contribute to his retirement while the AGR does not?

Answer: The technician contributes to the civil service portion of his or her retirement. The technicians' military retirement program is non-contributory as in the AGR member's.

Question: Which program is more costly to the taxpayer - AGR or civilian technician?

Answer: Neither form of full-time support is inherently more expensive. Every full-scale analysis of the relative cost of technicians and AGR members found overall cost to be dependent on comparative grade structure.

QUESTIONS SUBMITTED BY SENATOR LEAHY

Question: What is Army policy regarding air defense equipment priorities between Active and Guard units, and what resource constraints impede equipping National Guard units with a modern air defense weapons system as effective as those deployed by the Active Army?

Answer: The distribution of air defense and other equipment is not based on priority between Active and Guard units. It is based on an overall Department of the Army Master Priority List (DAMPL) containing both reserve and active component units. Major commands, activities and units are arranged in a relative order of priority. Priorities are established by Defense Department instructions, missions and functions of claimants and deployed/deployability status of claimants. [Deleted] [deleted]. Deployable reserve and active units stationed in CONUS [deleted]. For example, Army National Guard units serving as Roundout units have the [deleted]. Accordingly, when new air defense equipment such as STINGERS are issued both Reserve Component and Active Component units receive them at the same time. The Army National Guard unit, 5th Battalion 200 Air Defense Artillery, [deleted] [deleted]. Resource constraints such as reduced SGT YORK and STINGER funding have adverse modernization impacts on both the Active and Reserve Component units. The displacement of CHAPARRAL and VULCAN air defense systems is keyed to SGT YORK fielding. The displaced CHAPARRAL and Product Improved VULCANs will be distributed to selected Active and Reserve Component units. These systems are programmed to displace the DUSTER air defense weapon systems now supporting Army National Guard divisions. Under the current funding level, DUSTERs should be completely replaced in 1990. STINGERS will be provided to Reserve units beginning in FY 84 and continuing through 1993 in DAMPL sequence. Reduction in funding in any of these programs will adversely impact planned Reserve and Active Component modernization.

MODERNIZING BASIC NATIONAL GUARD EQUIPMENT

QUESTION: Army National Guard command and control, and troop and cargo vehicles in combat units range from 14 to 30 years old. The average Army National Guard tank is of Korean War vintage. Perhaps such obsolete and aging assets are economical for National Guard training--although this is arguable--but they clearly reduce readiness and sustainability in Guard units. Is it expected that National Guard units would actually go into combat with such equipment, and what level of effectiveness would be expected, as well as what rate of survivability? Is it realistic to plan for mobilization of National Guard units to fight with 30 year old tanks against modern Warsaw Pact armor and anti-tank weapons? What are the Army's current and projected plans for modernizing basic National Guard combat equipment, especially armor, and do these plans include replacement of current National Guard tanks with M60A3's as these become available with deployment of the M1?

ANSWER: The Army equipment distribution policy supports the DOD policy of "first to fight - first equipped." Equipment distribution is generally made in accordance with the Department of the Army Master Priority List (DAMPL) which places all Army units in order of wartime, overseas deployment or other employment. The distribution of modernization equipment is made using the additional criteria of readiness and support considerations. Transfer of equipment, such as equipment displaced due to the fielding of new systems, is managed in the same manner; i.e., from units with a higher priority to units with a lower priority, regardless of the component involved. The Army has equipment redistribution plans which allow for equipping some RC units with that modern equipment left in CONUS by AC units deploying to their POMCUS stocks.

These plans include decisions to be made at that point in time based on length of training required, etc. Some RC units would likely deploy with their organic equipment, but due to the late date of their actual arrival, they would be less likely to face Warsaw Pact modern systems. The RC units' level of effectiveness, readiness, and sustainability would be equal to their AC counterparts, given the threat they will likely face. However, their capabilities by comparison would be less and their survivability against modern Warsaw Pact systems is significantly less. The reality of budget constraints, capability to field, and production rates create the realistic total force environment in which the Army must plan. Current and projected plans for modernizing the Army follow the precepts previously mentioned. Modernization of armor systems in the National Guard includes replacement of current National Guard tanks with M60A3's as they become available with the deployment of the M1. National Guard roundout units are being equipped with M1 tanks and M60A3's to match their parent active units. Early deploying units will be equipped with M60A3's as soon as possible.

MODERNIZING BASIC NATIONAL GUARD EQUIPMENT

Many Armor units are equipped with the M48A5 tank which began as the M48 of Korean War vintage. However, the M48A5 is a modernized version including an upgraded gun, fire control, and power train. Even though it is equipped with more modern armor systems, the National Guard reflects the same medium truck fleet problem as the remainder of the Army. Nearly half are over age (15-20 years for medium trucks). As opposed to armor systems, rather than upgrading existing medium trucks, the Army generally replaces them as they wear out. In some cases this mixes newer systems with older. Since the Guard trucks are operated less than active unit trucks, the wear out time is a longer period. In any case, the National Guard shortfall will be greatly reduced by 1991 as the Guard will have been issued 3,500 10-ton HEMTT's and 5,025 new production 5-ton trucks. The major capability shortfall is in the area of command and control communications and electronics. While the Guard has approximately a 77 percent fill of its communications and electronics equipment, only half of it is of a generation that could easily be interfaced with Active Component (AC) communications equipment when deploying upon mobilization. This communications equipment, compared to today's state-of-the-art equipment, is extremely limited in capability. It is also incapable of being secured for voice transmission purposes. This shortfall will also be reduced by 1990.

TRAINING AMMUNITION

Due to high ammunition costs and lack of some types of ammunition, National Guard training must be conducted in many cases by substituting subcaliber training devices which simulate firing main gun ammunition. Due to the lack of full-scale firing ranges, subcaliber training devices are now widely used in the Army National Guard. While subcaliber training devices may have to continue to be used, it would seem essential that all Guardsmen do some training with full caliber ammunition.

QUESTION: What funding increases would be necessary to allow full caliber firing by National Guard members of individual weapons at least every other year? Does the Army have any plans to institute a program of training involving the periodic firing of full caliber munitions by National Guard units?

ANSWER: Training ammunition authorizations to support individual weapons training are not sufficient to accomplish required weapons qualification firing. Procurement of Caliber .45 and Caliber .38 ammunition does not fully support Army National Guard (ARNG) requirements. This level of authorization supports weapons firing for designated units such as Military Police and selected combat units. Rifle qualification firing is being conducted using Caliber .22 ammunition as a subcaliber for about 50% of the ARNG and is necessitated in many instances by travel time and distance to full scale ranges. Many units must use local indoor/outdoor ranges on which full caliber munitions cannot be used. An additional $1.1 million in FY 85 would be required to assure minimum quantities of ammunition are available to conduct weapons qualification firing.

There are no plans to institute a program of periodic full caliber qualification firing of individual assigned weapons for the ARNG. An annual requirement now exists for full caliber qualification. Resource constraints, e.g., travel time, distance to ranges, lack of adequate ranges, and ammunition availability, will continue to require the use of subcaliber devices and munitions for individual weapons qualification.

EXPANDED RESERVE COMPONENT TRAINING

I understand there is currently a proposal in the Army to increase the training time of Reserve Component (RC) units by raising the annual training period from two weeks to three, and to have a three day weekend per month instead of the present two day weekend training period.

Unquestionably, longer training periods would increase proficiency, effectiveness and readiness. However, it is important to assess fully the impact this proposal might have on the individual reservist.

QUESTION: Is the individual himself willing to dedicate the additional time required?

ANSWER: Expanded annual training, from two to three weeks, is currently a reality in some ARNG units. I am not aware of any proposal to have a three day weekend training period per month--nor would I support such a proposal. I do not feel all units need more annual training (AT) time. It is most effective when used in conjunction with specific events such as National Training Center rotation, Joint Training Exercise participation, and tank gunnery training. In those units where three week AT has been conducted, individual support has been good. I believe individual Guardsmen/women will support expanded annual training if used judiciously and if it is well planned, coordinated, and conducted. Personal considerations such as civilian job and family needs must always be a part of our decision making process.

QUESTION: Has any study been made of the readiness to reservists to commit themselves to additional training periods?

ANSWER: I am not aware of any study conducted to assess the impact additional/expanded training periods would have on reservists.

QUESTION: Has any study been made of the possible impact of longer training periods on recruitment/retention?

ANSWER: In 1977 the National Guard Bureau contracted National Analysts, a Philadelphia based research group, to conduct a National Guard Retention Study. Results of that study indicated that Guardsmen's attitudes toward training and time devoted to training periods appeared to have a more significant impact on retention than other factors studied, which included counseling, promotions, quality of life, discipline, leadership, benefits, pay, and human relations. The study went on to show that the Guard "competes" for the time of its members against many other demands on Guardsmen's lives. During the study, of those interviewed who were currently Guardsmen but indicated that they would not extend, 57% cited "other things to do", "training interference with civilian job", and "too little time for family/friends", as reasons for not extending their enlistment.

QUESTION: What impact would this proposal have on the individual family relationship, and his family's attitude toward his reserve membership?

ANSWER: As stated earlier, the Guard places demands on an individual's time that could otherwise be spent with his family. The impact on individual family relationships and the family's attitude toward his reserve membership would, in my opinion, worsen in proportion to how much additional time together the family must sacrifice because of Guard training requirements and if additional training requirements become excessive or too frequent.

QUESTION: Would the increased training time lead to greater loss due to family pressure?

ANSWER: In the absence of more recent findings on this subject I can only speculate. I believe Guardsmen/women and family support for expanded annual training will remain high as long as additional training requirements do not reach the point of being considered excessive, too frequent, and unless the Guard's demand on individual/family time is no longer considered worth the sacrifice.

QUESTION: What is the basis for the Army's conclusions?

ANSWER: My conclusion is based on my knowledge of what it takes and means to be a Guardsman supplemented by the results of the 1977 Retention Study.

QUESTION: Since the vast majority of reservists work within the civilian community, how will employers react to a substantially increased loss of workdays?

ANSWER: I am not aware of any definitive study conducted to assess the impact expanded training periods have on employer support for the Guard or Reserve. I must say however, that time demands of a civilian job are nearly as important to the Guardsman as the amount of time he has to spend with his family. The challenge is to meld the three (FAMILY-JOB-GUARD/RESERVE) so that they complement, not compete against, each other.

QUESTION: Have policymakers in the Army analyzed this issue and with what findings?

ANSWER: I can unequivocally state that under the Total Army policy, the impact on the family, for both Active and Reserve Component personnel, is an element of consideration in all decision making. I contend, that for the citizen soldier, the relationship with his/her employer is an equally important aspect of Reserve Component affiliation.

INCREASED ANNUAL TRAINING TIME

QUESTION: I understand there is currently a proposal in the Army to increase the training time of Reserve Component (RC) units by raising the annual training period from two weeks to three, and to have a three day weekend per month instead of the present two day weekend training period.

Unquestionably, longer training periods would increase proficiency, effectiveness and readiness. However, it is important to assess fully the impact this proposal might have on the individual reservist.

a. Is the individual himself willing to dedicate the additional time required? Has any study been made of the readiness to reservists to commit themselves to additional training periods? Has any study been made of the possible impact of longer training periods on recruitment/retention?

b. What impact would this proposal have on the individual's family relationship and his family's attitude toward his reserve membership? Would the increased training time lead to greater personnel loss due to family pressure? What is the basis for the Army's conclusions?

c. Since the vast majority of reservists work within the civilian community, how will employers react to a substantially increased loss of workdays? Have policymakers in the Army analyzed this issue, and with what findings?

ANSWER: There has been some discussion regarding increasing the Reserve Component (RC) annual training period from two weeks to three. I am not aware of a proposal to have a three day weekend training period per month instead of the present two day weekend training period.

Some of our units are already participating in three week annual training periods, although not every year. Units undergoing overseas deployment training as participants in major Joint Chiefs of Staff (JCS) exercise typically perform three weeks of annual training every three to five years. Thus far, experience has indicated reservists and employers support this additional annual training if adequate advance notice is provided and longer training periods are not an annual requirement. Army

Reserve units are currently participating in training for more than the normally scheduled two day weekend per month. As examples, units or elements of units may perform airborne training assemblies or nuclear training assemblies, and key unit personnel make preparations to conduct training on days that are additional to the two day weekend training period.

I know of no recent study or analysis made of the readiness of reservists to commit themselves to additional training periods or the possible impact of longer training periods on recruitment/retention.

MEDICAL EQUIPMENT SHORTFALLS

The Active Army is currently replacing medical equipment, affecting 90% of existing medical assemblages. It is my understanding that current Active Army plans project no increase in medical equipment for the Army National Guard until FY 88, and then only with displaced old equipment released from the Active Army.

It is imperative that every wounded or ill American soldier, whether Active Army, Reserve or Guard, receive equal and adequate medical treatment.

QUESTION: What is the Army National Guard's present shortfall in medical systems, especially hospitals and medical equipment sets, and what funding level would be required to eliminate this shortfall?

ANSWER: Hospital medical equipment on hand in the Army National Guard (ARNG) is approximately 15 percent of requirements. Fifty percent of ARNG hospital units have been identified as Prepositioning of Materiel Configured to Unit Sets (POMCUS) units for medical equipment sets. Only one of these units has equipment on hand in POMCUS. The Army Surgeon General currently budgets for ARNG hospital equipment to be placed in POMCUS for the ARNG, or to be stored in the depot system, earmarked for the ARNG. All POMCUS Combat Zone Hospitals inclusive of the ARNG, are projected as funded by FY 86, with delivery taking place beginning FY 88. This requirement (POMCUS and depot storage) is approximately $90 million. Hospital equipment required to be on hand in ARNG units for training or civil emergency support missions must be funded by the ARNG. Those dollar requirements are unquantified at this time. All other ARNG Combat Zone Hospitals are projected as being funded by FY 87. Displaced equipment will be used in the ARNG until modernization is completed (FY 90 or beyond). The program for modernization of ARNG medical equipment sets and satisfaction of ARNG medical equipment set shortages (totaling an estimated $66 million) is spread over the period FY 84 through FY 90, with much of the funding programmed in the FY 88-90 time period.

GUARD AND RESERVE

QUESTION: What is Army policy regarding modernization of medical equipment sets for the Active Army, Reserve and National Guard units?

ANSWER: The Army establishes a priority scheme for all Army units, inclusive of the Reserve Component (RC) units, formally known as the Department of the Army Master Priority List (DAMPL). In developing the DAMPL, consideration is given to unit's mission, geographical location for forward deployed units, and in the case of units based in CONUS, their deployment requirement. Resources are defined and programmed for medical equipment for the entire force. Procurement is made within budget and fiscal constraints. Distribution of medical equipment to the total force, Active and RC, is in accordance with the DAMPL. Occasionally out-of-DAMPL issue of medical equipment is made due to unforseen circumstances.

QUESTION: Why cannot Army National Guard medical equipment be modernized at the same time as the Active Army's equipment and according to a ratio related to current equipment in each component of the Army: Active, National Guard and Reserve?

ANSWER: Equipping/modernizing the force with new medical equipment/systems is programmed on a total force basis. In the case of medical equipment funded with the Procurement Appropriation, distribution is made based on the Army's formal Department of the Army Master Priority List (DAMPL). If funding is less than 100% of the requirement there is no ratio involved, rather those units expected to see combat first, are equipped/modernized first. In the case of the Operating and Maintenance Appropriations which are component specific (e.g., OMA, OMNG, OMAR), the availability of resources within each of these specific appropriations dictates the extent to which the component can be modernized. In addition, the component has significant latitude in the management of resources appropriated to that component.

EDUCATION REQUIREMENTS

QUESTION: I do not disagree with the concept of higher education requirements for increased grade and/or responsibility. However, in rural states with a limited population base like Vermont, it is difficult to qualify people to begin OCS, let alone have them gain sufficient credit hours to be commissioned. In a general mobilization situation, education requirements for commissioning would be waived in order to gain enough officer candidates to fill the vacant slots.

Does the Army have any plans to reevaluate educational requirements for Reserve Component officers? Would it be possible to design a career pattern for these individuals that allows 20 years service (eligible for retirement) and requires a Baccalaureate Degree to be promoted to major, while still satisfying the needs of the states and the Army?

ANSWER: Education requirements for Reserve Component officers were recently reevaluated. The decision to upgrade education requirements for appointment and promotion of Reserve Component officers was made in order to move more closely to a single standard and meet the demand for better educated officers for the Total Army.

Over a six year period, the entry level education requirement for Army National Guard Officer Candidate Schools will be increased to a minimum of sixty semester hours of college credit (2 years of college). A baccalaureate degree will be required for promotion to major for officers appointed after 30 September 1983. The Army is proposing in FY 86 to extend education assistance to Reserve Component members which will assist them in meeting the increased education requirements. Accordingly, officers will have a career pattern that allows for 20 years of service, while ensuring the highest quality officers possible to satisfy the needs of the states and the Army.

TACTICAL COMMUNICATIONS

QUESTION: The Air National Guard is responsible for 70% of the tactical communications of the Air Force, which are essential for the control of tactical aircraft. However, I understand that there is a $48.6 million shortfall in procurement funds for equipment that is necessary for the Air National Guard to carry out this critical mission. How is the Department of Defense going to handle this funding shortage and its accompanying effects on the ability of the Air National Guard to perform its role adequately?

ANSWER: The procurement of equipment necessary for Air Force tactical communications is programmed for procurement consistent with Air Force priorities. The intent is to equip all tactical communications units with state-of-the-art equipment based on the mission for which the units, Active and Air National Guard, are designated. The intent is also to fully equip all units sufficiently to meet the assigned and anticipated missions. The units will be equipped based on the priorities (per the Defense Guidance) of the missions for which the units have been designated to support. We are aware of no funding shortfalls. Procurement could, however, be expedited if additional funding, above the amount available to the Air Force, were available.

RESERVE INCENTIVES

Question: Active service members can have no more than nine years of service to qualify for a retention bonus. In Vermont, we experience a high number of mid-career losses of some of our most qualified non-commissioned officers. Does the Department of Defense endorse raising the maximum years of service necessary to qualify for a retention bonus from nine to fourteen as a means of stopping this undesirable exodus of personnel?

Answer: The Department of Defense would support an amendment to the current authority for reserve component reenlistment incentives to permit the Secretary of Defense to establish years-of-service criteria for award of reenlistment bonuses. Experience has shown that the vast majority of losses in the Selected Reserve occurs during the first nine years of service. The current bonus program is designed to encourage reenlistments up to or beyond nine years. However, discretionary authority for the Secretary of Defense to set years-of-service controls would enable the Department and the military services to manage the program more efficiently by targeting the incentives to certain mid-career skills where critical shortages exist.

MILITARY SERVICE OBLIGATION

Question: The FY 1984 Department of Defense Authorization bill allowed the Secretary of Defense to increase the military service obligation from six to eight years. Secretary Weinberger has announced that this change will take place as of June 1, 1984. I fear that this will have a negative impact on recruiting both for the active and reserve components of our military forces. While I realize there is a need to increase the size of the Individual Ready Reserve, has the Department of Defense studied thoroughly the likely effects of this action on recruiting? What are its findings?

Answer: The Department has not studied the effects on recruiting of extending the military service obligation to eight years. Our surveys show that while a majority of service members are aware of the overall military service obligation, their primary concern on enlistment is the extent of the contractual commitment to serve on active duty or in the Selected Reserve. The residual time spent in the IRR appears not to be a fundamental consideration in the decision to enlist. The discretionary authority contained in Public Law 98-94 allows the Secretary of Defense to adjust the service obligation between not less than six and no more than eight years. The Department will adjust the obligation as necessary to support manning requirements for the total force including the active and reserve forces and the IRR. However, the continuing shortfalls in critical mobilization skills warrants that the eight-year obligation be implemented now. Since this change will have no effect on the IRR inventory until 1990, any further delays in implementation will postpone resolution of this problem indefinitely.

COMBAT READINESS REPORTING

QUESTION: Please provide the Committee with a table showing unit combat readiness ratings for all reserve component units for each fiscal year beginning with fiscal year 1982 and ending with the most current combat readiness reports in the Department's possession. These combat readiness ratings are the so-called "C-ratings" reported through the Joint Chiefs of Staff Unit Status and Identity Report (UNITREP) system. Please segregate this data by state and by reserve component. Please provide an explanatory narrative section addressing any changes in reporting baseline conditions which may make a particular "C-rating" unrepresentative of the true status of the reporting unit. Such changes might be a change in mission, a change in Table of Organization and Equipment, etc.) Also indicate reasons for any "C-4" (not combat ready) ratings, showing whether the unit was unready due to personnel, training, supply, or maintenance, or a combination of these reported factors.

Please identify for the Committee any trends in the UNITREP combat readiness data provided in response to question 1 which you feel are significant.

Please discuss your plans for remedial action for any units currently rated "C-4."

ANSWER: Any information presented at this time would be the product of different Military Department requirements which examine different readiness elements from differing points of view. Each Military Department has different individual readiness reporting criteria and direct comparison of individual reporting data is not always meaningful. Additionally, the Military Departments differ in reporting periods, i.e., Army submits to OJCS for Guard and Reserve units semiannually as of 15 April and 15 October while the Air Force Reserve Components report at least monthly. The UNITREP system makes no attempt to segregate unit readiness data by state, i.e., a maneuver division may have units in more than one State as some do. The recent confusion and controversy over unit readiness has been highlighted by the Secretary of Defense (SECDEF). The SECDEF has established a task force to be co-chaired by OASD(MI&L) and the OJCS to include OASD(RA) personnel, to focus on the UNITREP systems and to develop a more realistic and meaningful assessment of readiness trends. The task force will attempt to complete this effort within the next nine months. To answer the committee's specific questions at this time would not provide meaningful data that would properly identify readiness trends, nor remedial actions to correct shortcomings of units having "C-4" ratings.

ABILITY TO CONDUCT NBC OPERATIONS

QUESTION: How would you characterize your units' ability to conduct sustained combat operations in a chemically, biologically, or radiologically contaminated environment?

ANSWER: Army National Guard units have improved their ability but are constrained by the nature of the training periods available to them. To improve our readiness for the integrated battlefield environment, command emphasis was placed on Nuclear, Biological, Chemical (NBC) training. NBC training has been integrated at all levels of command; school training and military occupational specialty qualification of personnel in NBC positions have been stressed; and the priority for purchasing chemical defense equipment, especially for training, has been raised. Other initiatives include a senior officer/chemical staff officer NBC course developed by the Chemical School in coordination with the National Guard Bureau to enhance senior officer knowledge of the chemical threat and operations on the integrated battlefield. We also conduct at our Professional Education Center a Medical Management of Chemical Casualties course for our Army Medical Department health care officers.

These actions improve our ability to execute basic procedures that will permit survival on a chemical battlefield but do not of themselves assure the ability to conduct sustained combat operations. Sustained operation in a chemical environment is extremely resource intensive and results in an overwhelming degradation of combat capability. The protective equipment and the additional procedures and decisions required tax the force's fighting capability. This burden becomes greater over time as the effects of encapsulation, extra demand on the decision making process, and resupply of protective gear compound. This causes a very one-sided disadvantage to a force which relies on defensive measures against a force which uses chemical weapons but does not have to adopt similar protection and the degradation it causes.

CHEMICAL, BIOLOGICAL AND RADIOLOGICAL (CBR) OPERATIONS

QUESTION: How would you characterize your units' ability to conduct sustained combat operations in a chemically, biologically or radiologically contaminated environment?

ANSWER: A recent United States Army Forces Command (FORSCOM) sampling of 409 Reserve Component battalion showed that CBR is the weakest of all training areas. Very few units would be able to conduct sustained combat operations in a chemically, biologically or radiologically contaminated environment. FORSCOM is placing increased emphasis on CBR training in order to correct this deficiency.

CHEMICAL, BIOLOGICAL, AND RADIOLOGICAL WARFARE

QUESTION: How would you characterize your units' ability to conduct sustained combat operations in a chemically, biologically or radiologically contaminated environment?

ANSWER: Today, with the exception of submarines, Naval forces, including those of the Naval Reserve, have only a moderate capability to "survive" under such conditions, and our ability to continue combat operations in a contaminated environment is marginal. The Navy is pursuing a comprehensive program to improve and maintain the capability to sustain operations in a CBR (Chemical, Biological, Radiological) contaminated environment.

Current development and procurement programs for increasing our defensive posture include improvements in individual protection, chemical and radiological detection, decontamination, collective protection, and training. The stock level of chemical protective masks and clothing varies from base to base and unit to unit as a function of unit mission and relative threat. Improved CBR defense training starts in accessions programs and continues through exercises of CBR defense procedures at almost all training levels.

Units require considerable equipment to attain and maintain an operational capability in a contaminated environment. This includes appropriate individual and collective protection equipment, alarms, decontamination systems, and training in survival and decontamination procedures.

Improved defense alone is not sufficient to deny an aggressor the advantage of utilizing CBR weapons. The heat stress and physical encumbrance of protective clothing, and the time required to decontaminate ships and equipment significantly degrade our ability to conduct combat operations. A credible retaliatory capability is necessary to deter the first use of these weapons.

QUESTION: Do you believe the chemical/biological/radiological (CBR) defense equipment required by your units' current Tables of Organization and Equipment (TOE's) (or equivalent authorization documents) is adequate to allow your units to conduct sustained combat operations in a CBR contaminated environment?

ANSWER. The equipment inventory which the Navy has identified for use in a CBR contaminated environment would allow our units to conduct sustained combat operations, but with their ability severely degraded.

QUESTION: What changes would you recommend in type, design, quality, or quantity of CBR defense equipment for your units?

ANSWER: Individual protective equipment that reduces heat stress and permits better interface with equipment is vital to improving our defensive posture. Detectors and alarms that can

MARINE CORPS RESERVE

QUESTION: How would you characterize your units' ability to conduct sustained combat operations in a chemically, biologically or radiologically contaminated environment?

ANSWER: The Reserve units, as well as active units, are marginally capable of conducting sustained combat operations against an enemy possessing Soviet NBC offensive capabilities. The current deficiency is qualitative rather than quantitative. The U.S. Military as a whole is working to overcome this deficiency. The U.S. Army (DoD executive agent for NBC research, development, test and evaluation), the U.S. Air Force, and the U.S. Navy have programmed an extensive NBC equipment development effort. The Marine Corps closely monitors these other service efforts as well as foreign government NBC equipment development efforts. Planned improvements in SMCR capabilities include procurement of improved personal protective equipment, increasing the capabilities of equipment to operate in chemical and nuclear warfare environments, and procurement of new chemical agent alarms and decontamination apparatus. The Marine Corps has developed plans for follow-on individual protective systems; detection, identification and warning systems; decontamination systems; and collective protection equipment.

COMBAT OPERATIONS IN CBR

QUESTION: How would you characterize your units' ability to conduct sustained combat operations in a chemically, biologically or radiologically contaminated environment?

ANSWER: Although the Air National Guard has a [deleted] [deleted] for combat operations in a CBR contaminated environment, [deleted]. This rating is based primarily on the lack of critical, on hand CBR defense assets -- particularly the protective mask and a reusable protective ensemble. In wartime, the Air National Guard would, in large part, operate out of locations without filtered protection facilities. This fact, coupled with the shortage of protective masks and reusable protective ensembles, would severely degrade operations in a CBR environment.

COMBAT OPERATIONS IN CBR

QUESTION: How would you characterize your units' ability to conduct sustained combat operations in a chemically, biologically or radiologically contaminated environment?

ANSWER: Our capability to conduct sustained combat operations in a chemical, biological, or radiological contaminated environment will depend for the most part on three separate factors: individual protective suits to wear in exposed environments, protective shelters for rest and relief, and equipment to detect CBR contamination and to clean contaminated areas and equipment. We practice on a regular basis operating in simulated contaminated environments. We can perform our required missions as long as we are capable of remaining in our protective suits, but collective protection is the key to sustainability. We must have "clean areas" to eat, sleep, perform bodily functions and change protective suits. The Air Force is presently working on new equipment that will improve our ability to identify and warn of contamination, new suits that will reduce thermal burden and new collective protections systems for rest and relief. These actions are conducted as a Total Force endeavor and we in the Air Force Reserve are cooperating in these efforts.

SUBCOMMITTEE RECESS

Senator **STEVENS**. Thank you very much, gentlemen. I appreciate it.

The subcommittee stands adjourned.

[Whereupon, at 11:45 a.m., Thursday, April 26, the subcommittee was recessed to reconvene at the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1985

TUESDAY, MAY 15, 1984

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:05 a.m., in room SD-192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Kasten, Stennis, and Proxmire.

DEPARTMENT OF DEFENSE

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY DARPA

STATEMENT OF ROBERT S. COOPER, PH.D., DIRECTOR, DEFENSE ADVANCED RESEARCH PROJECTS AGENCY

SPACE PROGRAMS

BUDGET REQUEST

Senator STEVENS. I apologize for being slightly late. This is the time we have scheduled to review the Department of Defense space programs and the strategic defense initiative.

Today, we will review the Department of Defense space budget and programs such as the space shuttle, the commercial ELV production, the antisatellite program and numerous satellite programs. We also will review the space-related aspects of the strategic defense initiative.

The fiscal year 1985 budget is $12.9 billion. This is an increase of $1.3 billion over fiscal year 1984, or about 17-percent real growth.

The Department of Defense portion of the strategic defense initiative totals $1.8 billion, an increase of almost $800 million over the SDI-related programs funded in fiscal year 1984.

Our committee notes that the proposed budget revision offered as part of the President's deficit package doesn't touch this portion of the budget.

INTRODUCTION OF WITNESSES

I would like to welcome the witnesses here today, Dr. Cooper, the Director of DARPA, Lt. Gen. James Abrahamson, the Director of Strategic Defense, and Dr. Charles Cook, Deputy Assistant Secretary of the Air Force, Space Plans and Policy.

Will you please introduce those who are with you, as they may make any statements. We will put your complete written statements in the record. We would like to have you begin.

Is there any way to put that screen in such a way that those in the audience can see it, as well as Senator Stennis and myself? It is a one-sided affair the way it is now.

While we rearrange that, we would be pleased to have you proceed with your statement, Dr. Cooper.

IMPORTANCE OF SPACE PROGRAMS

Dr. COOPER. Thank you, Mr. Chairman.

I am pleased to have this opportunity to appear before this committee this morning to discuss the appropriation request for defense space programs.

As you have requested, I have entered a comprehensive statement in the record, but I would like to just briefly summarize some of the key aspects of that statement.

It is clear that both the Soviet Union and the United States recognize the importance of space systems as part of our force structure. Generally, our U.S. military space assets provide support to critical and stabilizing functions, such as communications, control, warning, navigation, weather and space defense. Our systems are not a reaction to Soviet Union space activities, but meet critical military needs related to our terrestrial forces.

Space systems are and will continue to be designed to ensure secure command and control communications functions in order to prevent accidental war, and they provide a major arms control and stabilization factor which will be very difficult to monitor without the support provided from these systems.

BUDGET CHANGES

As you pointed out in your opening statement, our original request was $12.9 billion for the DOD space programs in fiscal year 1985, but as a result of recent internal reductions in response to the President's budget reduction initiative, about $100 million have been taken from the space programs overall, none from the strategic defense initiative. About $900 million of the $12.8 billion will be allocated to the strategic defense initiative which General Abrahamson will cover in his statement.

CONSOLIDATION OF SPACE OPERATIONS

Since 2 years ago, we have continued in Defense to consolidate our space operations in major organizational changes both in the Air Force and in the Navy. The Air Force space command is set up and functioning, and the Navy's new space command establishment was established on October 1 of last year.

We are continuing to look into the question of the need for a unified space command in Defense to unify the operations of our space assets in support of our forces worldwide.

CONTINUATION OF PROGRAMS

There are a number of programs that are continuing and are the major reason for the increases that we are requesting for fiscal year 1985 in the budget. These programs are influenced by the space policy which was articulated on July 4, 1982, by the President in his national space policy.

In that policy, the space transportation system was recognized as the primary space launch system, but the President's directive that followed his policy also recognized that national security considerations may dictate the development of an alternative launch capability to that of the shuttle, a complementary capability.

EXPENDABLE LAUNCH VEHICLE

We have prepared a program to complement the space shuttle with an expendable launch vehicle, and RFP's have been released to industry for the acquisition of commercial launch services in fiscal year 1988 through the first part of the 1990's time period. We expect to receive these proposals later on this year, and the proposals are responding to a request for the provision of two launchers per year for a minimum of 5 years starting in fiscal year 1988.

The major issue in this is the potential contingent liability that the Government would have to accrue in signing contract with a commercial vendor of space launch capabilities. Mr. Taft's letter of April 6 to the Congress describes the need this contingent liability.

In addition, if the Congress is not favorably disposed toward this approach of the financing of expendable launch vehicles, we are continuing to work inside the Defense Department to find alternative ways to finance the potential contingent liability for the commercial development.

CONSOLIDATED SPACE OPERATION CENTER

Other important programs that are continuing, and require increased funding in the fiscal year 1985 time period, are the development of the CSOC, which is the Consolidated Space Operation Center, at Colorado Springs. We are continuing the construction at Vandenberg Air Force toward an October 1985 first launch. We expect that Defense's participation in the space shuttle program will be on time and within budget.

MILSTAR PROGRAM

Some additional important space programs that are being funded in the 1985 budget year are: Continuation of the Milstar Program, and the development of the IUS. We are in the 4th year of our multiyear procurement of 28 GPS production satellites for precision naviation, and that program continues strongly in the 1985 budget year.

ASAT PROGRAMS

We continue our space surveillance and out ASAT programs in the 1985 budget year, and we are hopeful that the Congresss will strongly support the ASAT in fiscal year 1985. Fiscal year 1985 is the payoff year for the ASAT Program. It was started in the late 1970's as a response to Soviet space activities.

We will be continuing testing this year, after two successful tests in late fiscal year 1983 and early fiscal year 1984. The testing program, of course, is in contention because of the Tsongas amendment. We hope to resolve that issue with Congress in time to go ahead with our first launch of an ASAT against an object in space in the latter part of this year or early next year. We have one final test of the sensor in that program before an all out test of the antisatellite capability will occur.

SPACE TEST PROGRAMS

We have a wide variety of space technology activities, ranging all the way from our space tests program through a number of new initiatives such as the Space Nuclear Power Program, which has now been transferred over into the SDI. Much of the advanced space technology is contained in the SDI and will be reported by General Abrahamson.

Our budget request supports a very strong Defense posture in space in the coming years. Space is of growing importance to Defense as is indicated by the size of the budget request, by our organizational initiatives, and by the strong support that space now finds in the Defense Department.

In most cases, it is the system of choice, not because of its inherent appeal, but because it is the most cost-effective way to approach individual military problems. We strongly request the support of this committee for the full appropriation in the fiscal year 1985 budget year.

Thank you, Mr. Chairman. I will hand over the podium to General Abrahamson to discuss strategic defense initiative.

[The prepared statement of Dr. Cooper follows:]

PREPARED STATEMENT OF DR. ROBERT S. COOPER

DIRECTOR

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY

INTRODUCTION

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE, I AM PLEASED TO HAVE THIS OPPORTUNITY TO APPEAR BEFORE YOU THIS MORNING TO ADDRESS THE DEPARTMENT OF DEFENSE SPACE PROGRAMS.

SINCE THE FIRST SPUTNIK LAUNCH, MANKIND HAS MARCHED CONFIDENTLY FORWARD WITH EVER INCREASING USES OF SPACE SO THAT ITS USE HAS BECOME A VITAL PART OF OUR EVERY DAY LIVES. THE REVOLUTION IN THE USE OF SPACE HAS OPENED VITAL OPPORTUNITIES FOR NATIONAL DEFENSE. BOTH WE AND THE SOVIETS RECOGNIZE THE IMPORTANCE OF SATELLITE SYSTEMS AS A PART OF THE FORCE STRUCTURE. U.S. MILITARY SPACE ASSETS PROVIDE SUPPORT TO CRITICAL AND STABILIZING FUNCTIONS SUCH AS: COMMUNICATIONS, CONTROL, WARNING, NAVIGATION, WEATHER AND SPACE DEFENSE. SPACE SYSTEMS ARE, AND WILL CONTINUE TO BE, DESIGNED TO ENSURE SECURE COMMAND, CONTROL AND COMMUNICATIONS FUNCTIONS IN ORDER TO PREVENT ACCIDENTAL WAR. OUR LAUNCH DETECTION SATELLITES AND WARNING SYSTEMS CONTRIBUTE IMMEASURABLY TO STRATEGIC STABILITY AND DETERRENCE. LIKEWISE, ARMS CONTROL WOULD BE VERY DIFFICULT TO MONITOR WITHOUT THE SUPPORT PROVIDED FROM SPACE SYSTEMS. THESE ADVANTAGES, COUPLED WITH THE GLOBAL ACCESS PERMITTED BY SATELLITES AND THE EFFICIENCY AND EFFECTIVENESS OF THEIR USE, BOTH IN TERMS OF MISSION AND COST, REFLECT THE PRIMARY REASONS WE ARE IN SPACE.

OUR MILITARY SPACE PROGRAMS ARE NOT SIMPLY A REACTION TO SOVIET SPACE ACTIVITIES, BUT ARE THE RESULT OF OUR CONTINUING

EVALUATION OF THE BEST MANNER IN WHICH THE DOD SHOULD MEET ITS NATIONAL SECURITY OBJECTIVES. WE DO NOT LOOK AT SPACE AS A MISSION BUT A REGION

IN WHICH SUPPORTING MILITARY OPERATIONS MAY BE CARRIED OUT. AS WITH ALL OTHER POSSIBLE METHODS OF MEETING OUR NATIONAL SECURITY NEEDS, TO THE EXTENT THAT SPACE SYSTEMS DEMONSTRATE A COMPETITIVE ADVANTAGE OVER ALTERNATIVE MEANS TO ACCOMPLISH A MISSION, THEY RECEIVE FUNDING.

DOD SPACE ACTIVITIES

TO MAINTAIN THE SECURITY OF THE UNITED STATES, THE DOD ACQUIRES AND OPERATES SPACE SYSTEMS AND PURSUES ADVANCES IN RELATED RESEARCH AND TECHNOLOGY DEVELOPMENT. DURING THE PAST YEAR, WE HAVE MOVED FURTHER DOWN THE ROAD IN ACCOMPLISHING THE GOALS OF THE DOD SPACE POLICY.

TO CONTINUE THE MOMENTUM OF ACHIEVING TECHNICALLY SUPERIOR SYSTEMS WITH ENHANCED OPERATIONAL CHARACTERISTICS, WE ARE REQUESTING $12.9. BILLION DOLLARS FOR NATIONAL SECURITY SPACE PROGRAMS IN FY85. THIS INCLUDES APPROXIMATELY $900M RELATED TO THE PRESIDENT'S STRATEGIC DEFENSE INITIATIVE.

IN OCTOBER 1982 THE AIR FORCE CONSOLIDATED ITS SPACE OPERATIONS WITH THE FORMATION OF THE AIR FORCE SPACE COMMAND. DURING THE PAST YEAR, ADDITIONAL ACTIVITIES WITHIN THE DEPARTMENT OF DEFENSE HAVE FURTHER CONSOLIDATED SPACE ACTIVITIES. THE DEPARTMENT OF THE NAVY ON OCTOBER 1, 1983, ESTABLISHED THE NAVAL SPACE COMMAND, HEADQUARTERED AT THE NAVAL SURFACE WEAPONS CENTER AT DAHLGREN, VIRGINIA. THIS COMMAND HEADED BY FORMER ASTRONAUT, COMMODORE DICK TRULY, ASSUMED OPERATIONAL RESPONSIBILITY FOR NAVY

SPACE SYSTEMS, PLUS COORDINATION RESPONSIBILITY WITH OTHER OPERATIONAL ACTIVITIES. TWO OF ITS MAJOR OPERATIONAL RESPONSIBILITIES ARE THE NAVY NAVIGATION SATELLITE SYSTEM, COMMONLY REFERRED TO AS TRANSIT AND THE NAVAL SPACE SURVEILLANCE SYSTEM OR NAVSPASUR. IN OCTOBER OF THIS YEAR, THIS COMMAND WILL EXPAND ITS RESPONSIBILITY TO INCLUDE NAVY SATELLITE COMMUNICATION, INCLUDING GAPFILLER, FLTSATCOM, AND LEASAT SATELLITES.

WE ARE ALSO LOOKING INTO THE QUESTION OF THE NEED FOR A UNIFIED SPACE COMMAND. TYPICAL FUNCTIONS OF THIS ACTIVITY WOULD INCLUDE THE INTEGRATION OF SPACE SYSTEMS INTO JOINT EXERCISES AND THE OPERATIONAL RESPONSIBILITY FOR PARTICULAR SPACE SYSTEMS, SUCH AS GPS AND MILSTAR.

I WOULD NOW LIKE TO ADDRESS SPECIFICALLY THOSE PROGRAMS THAT ARE OF INTEREST TO YOU.

LET ME BEGIN BY ADDRESSING THE SUBJECT OF DEFENSE SPACE LAUNCH STRATEGY. ON JULY 4, 1982, THE PRESIDENT SIGNED A "NATIONAL SPACE POLICY" WHICH STATED, "THE U.S. SPACE TRANSPORTATION SYSTEM (STS) IS THE PRIMARY SPACE LAUNCH SYSTEM FOR BOTH NATIONAL SECURITY AND CIVIL GOVERNMENT MISSIONS." THE DOD HAS BEEN AND REMAINS COMMITED TO THE SPACE SHUTTLE AS OUR PRIMARY SPACE LAUNCH SYSTEM. VIRTUALLY ALL NATIONAL SECURITY PAYLOADS ARE BEING MODIFIED OR HAVE PLANS TO BE MODIFIED TO FLY ON THE SHUTTLE. HOWEVER, THE PRESIDENT'S DIRECTIVE ALSO RECOGNIZED THAT NATIONAL SECURITY CONSIDERATIONS MAY DICTATE DEVELOPMENT OF LAUNCH CAPABILITIES OTHER THAN THE SPACE SHUTTLE SO THAT WE HAVE AN ASSURED ACCESS TO SPACE.

EXISTING DEFENSE SPACE LAUNCH PLANNING SPECIFIED THAT DOD RELY ON FOUR UNIQUE, MANNED ORBITERS FOR SOLE ACCESS TO SPACE FOR ALL NATIONAL SECURITY SPACE SYSTEMS. DOD HAS CONCLUDED THAT THIS, COUPLED WITH AN ERODING INDUSTRIAL BASE, DOES NOT REPRESENT AN ASSURED, FLEXIBLE AND RESPONSIVE ACCESS TO SPACE. THE DEFENSE DEPARTMENT BELIEVES THAT TOTAL RELIANCE UPON THE STS FOR SOLE ACCESS TO SPACE REPRESENTS AN UNACCEPTABLE NATIONAL SECURITY RISK. DOD BELIEVES THAT A COMPLEMENTARY SYSTEM IS NECESSARY TO PROVIDE HIGH CONFIDENCE OF ACCESS TO SPACE.

THE SOLUTION TO THE PROBLEM MUST BE AFFORDABLE AND EFFECTIVE, WHILE OFFERING A HIGH DEGREE OF REQUIREMENTS SATISFACTION, LOW TECHNICAL RISK, AND REASONABLE SCHEDULE AVAILABILITY. AN UNMANNED, EXPENDABLE LAUNCH VEHICLE MEETS THESE CRITERIA AND SATISFIES DOD OPERATIONAL NEEDS FOR A LAUNCH SYSTEM WHICH COMPLEMENTS THE STS AND EXTENDS OUR ABILITY TO CONDUCT LAUNCH OPERATIONS FURTHER INTO THE SPECTRUM OF CONFLICT. THESE SYSTEMS CAN PROVIDE UNIQUE AND ASSURED LAUNCH CAPABILITIES IN PEACE, CRISIS AND CONFLICT LEVELS SHORT OF GENERAL NUCLEAR WAR. THESE VEHICLES ARE DESIGNED TO BE EXPENDABLE AND THE LOSS OF A SINGLE VEHICLE AFFECTS ONLY THAT ONE MISSION AND WOULD NOT DEGRADE FUTURE COMMON, NATIONAL LAUNCH CAPABILITIES AS WOULD THE LOSS OF A SHUTTLE.

AT ISSUE HERE IS THE REALIZATION THAT WE AS A NATION ARE LOSING OUR LAUNCH VEHICLE INDUSTRIAL BASE, BOTH IN SHUTTLE AND ELVS. AT THIS POINT THERE ARE NO NEW CONTRACTS BEING AWARDED FOR PROCUREMENT OF SPACE LAUNCH SYSTEMS. THE LAST SHUTTLE ORBITER WILL BE DELIVERED THIS YEAR AND THE LAST TITAN IS ALMOST COMPLETED. AS A RESULT, THE U.S. WILL SOON BE TOTALLY RELIANT ON FOUR ORBITERS FOR PROVIDING ACCESS TO SPACE. FURTHERMORE, UNLESS WE TAKE ACTION QUICKLY, THE NATION'S INDUSTRIAL BASE FOR SPACE LAUNCH VEHICLES WILL QUICKLY ERODE.

ON FEBRUARY 7TH OF THIS YEAR THE SECRETARY OF DEFENSE PROMULGATED HIS SPACE LAUNCH STRATEGY IN RESPONSE TO VALIDATED DOD ASSURED SPACE LAUNCH REQUIREMENTS AND IMPLEMENTED THE LAUNCH POLICIES CONTAINED IN THE NATIONAL SPACE POLICY AND THE DEFENSE SPACE POLICY. THIS STRATEGY ADDRESSES BOTH THE NEAR AND LONG TERM. IN THE NEAR TERM THE STS WILL REMAIN THE PRIMARY LAUNCH SYSTEM FOR ROUTINE DOD LAUNCH SERVICES. UNMANNED, EXPENDABLE LAUNCH VEHICLES REPRESENT A COMPLEMENTARY CAPABILITY TO THE STS AND WILL BE MAINTAINED AND ROUTINELY LAUNCHED TO ENSURE THEIR OPERATIONAL VIABILITY. TO ACCOMPLISH THIS, SELECTED NATIONAL SECURITY PAYLOADS WILL BE IDENTIFIED FOR DEDICATED LAUNCH ON ELVS, BUT WILL REMAIN COMPATIBLE WITH THE STS.

AS YOU MAY BE AWARE, A REQUEST FOR PROPOSAL HAS BEEN RELEASED BY THE AIR FORCE TO DEFINE THE EFFORTS REQUIRED OF A CONTRACTOR TO DEVELOP AND LAUNCH AN EXPENDABLE LAUNCH VEHICLE, PRESENTLY DESIGINATED AS STANDARIZED LAUNCH VEHICLE X (SLV-X). DOD HAS IDENTIFIED A REQUIREMENT FOR A COMPLEMENTARY SYSTEM TO THE SHUTTLE/CENTAUR THAT WILL DELIVER 10,000 POUNDS TO GEOSYNCRHONOUS ORBIT. AS PRESENTLY DEFINED, THE REQUIREMENT IS FOR TWO LAUNCHES PER YEAR FOR FIVE YEARS, ALL OUT OF THE KENNEDY SPACE CENTER (KSC), WITH THE CONTRACTOR FUNDING THE DEVELOPMENT AND OTHER NON- RECURRING COSTS AND AMORTIZING THESE COSTS OVER THE LENGTH OF THE CONTRACT

TOGETHER WITH HIS COST OF CAPITAL. THESE COSTS WILL BE INCLUDED IN THE FIXED PRICE THAT THE GOVERMENT WILL PAY FOR THE TEN VEHICLE BUY.

LET ME ADD THAT ALTHOUGH WE ARE PURSUING A LIMITED ELV CAPABILITY TO COMPLEMENT THE SHUTTLE, THE DOD REMAINS FULLY COMMITTED TO THE SHUTTLE. ONE NEEDS ONLY TO LOOK AT THE DOD INVESTMENT IN SHUTTLE DEVELOPMENT, THE COST OF THE VANDENBERG LAUNCH FACILITY AND THE SIZE OF THE PROGRAM CONCERNED WITH THE CSOC TO GAUGE HOW MUCH THE SHUTTLE MEANS TO DOD. WHAT WE ARE ADDRESSING WITH THIS SPACE LAUNCH STRATEGY IS NOT THE DETERMINATION OF A GOOD VERSUS BAD OR ADEQUATE VERSUS AN INADEQUATE LAUNCH SYSTEM BUT A NATIONAL SECURITY NEED THAT CANNOT BE COMPROMISED. THE ELV QUESTION ADDRESSES THE NEAR TERM PART OF THE OVERALL STRATEGY. FOR THE FAR TERM WE WILL CONTINUE TO INVESTIGATE ALTERNATIVES INCLUDING THOSE THAT TAKE ADVANTAGE OF OUR INVESTMENT IN BOTH ELV AND SHUTTLE TECHNOLOGY.

WITH REGARD TO THE 5TH ORBITER, I HAVE THE FOLLOWING COMMENTS. A FOUR ORBITER FLEET WITH ALL ORBITERS IN SERVICE WOULD SUPPORT 17 TO 25 FLIGHTS PER YEAR WHICH APPROXIMATES NASA'S PROJECTED MISSION MODEL. WHAT CONCERNS ME IS THAT GIVEN OUR RELIANCE ON THE SHUTTLE, AND RECOGNIZING THAT EVERYTHING HAS A FINITE LIFE, IT IS IMPORTANT THAT WE PLAN ON HOW TO MAINTAIN THIS SHUTTLE CAPABILITY. REGARDLESS OF ASSUMPTIONS, A FOUR ORBITER FLEET CANNOT TOLERATE ATTRITION OR EXTENDED DOWN TIME EITHER FOR OVERHAUL OR REPAIR WITHOUT SIGNIFICANT IMPACT TO THE USER COMMUNITY. AS I HAVE TESTIFIED IN THE PAST, THE DOD DOES NOT HAVE AN EXPLICIT REQUIREMENT FOR A

5TH ORBITER SINCE WE HAVE THE OPTION OF BUMPING PAYLOADS FOR NATIONAL SECURITY USE OF THE SYSTEM. THE QUESTION OF THE 5TH ORBITER SHOULD NOT RELY ON AN EXPLICIT DOD OR CIVIL REQUIREMENT BUT ON THE ISSUE OF MAINTAINING THE SHUTTLE PROGRAM.

SPACE SUPPORT

I WOULD NOW LIKE TO BRING THIS COMMITTEE UP-TO-DATE ON A NUMBER OF PROGRAMS THAT ARE OF INTEREST TO THIS COMMITTEE.

WE ARE CONTINUING WITH THE DEVELOPMENT OF THE CONSOLIDATED SPACE OPERATIONS CENTER OR CSOC AND THE VANDENBERG FACILITY. REGARDING CSOC, WE HAVE AWARDED THE CONTRACT TO PROVIDE SYSTEM INTEGRATION SUPPORT SERVICES. FACILITY CONSTRUCTION HAS BEEN AWARDED. THE DESIGN OF THE SATELLITE CONTROL INFORMATION PROCESSING SYSTEM IS PROCEEDING WITH MORE THAN 30 PERCENT OF THE SOFTWARE COMPLETED. WE ARE SCHEDULED TO BEGIN OPERATION IN EARLY 1986 WITH A SATELLITE EMERGENCY BACKUP CAPABILITY AND PLAN TO HAVE A SHUTTLE PLANNING CAPABILITY IN THE LATE 1980S. RECENTLY THERE HAS BEEN SOME QUESTION AS TO THE NEED FOR THE SHUTTLE OPERATIONS AND PLANNING CENTER OR SOPC PORTION OF THE CSOC. I WOULD LIKE TO DISPELL THESE QUESTIONS ONCE AND FOR ALL. THIS FACILITY WILL PROVIDE REDUNDANCY FOR THE JSC FACILITIES, ENHANCE SECURITY, AND PERMIT MORE DOD AUTONOMY. THIS AUTONOMY IS AN IMPORTANT FACTOR SINCE IT OFFLOADS NASA AND JSC FACILITIES AND PERSONNEL, THEREBY ALLOWING NASA TO CONCENTRATE MORE RESOURCES ON NEW INITIATIVES SUCH AS SPACE STATION. ADDITIONALLY, THE CSOC WOULD PROVIDE A MEANS FOR A UNIFIED SPACE COMMAND TO

INTEGRATE MILITARY SPACE PROGRAMS WITH OTHER PROGRAMS SUCH AS SDI. FURTHERMORE, THE ESTABLISHMENT OF SOPC ENHANCES THE "SEPARATENESS" OF THE CIVIL AND THE MILITARY SPACE ACTIVITIES. WE ARE REQUESTING $241.9 MILLION IN THE FY85 PRESIDENT'S BUDGET FOR R&D AND PROCUREMENT. THESE FUNDS WILL PRIMARILY PROVIDE FOR SYSTEM INTEGRATION, TRAINING AND THE PROCURING OF THE EQUIPMENT FOR THE COMMUNICATIONS SEGMENT.

THE VANDENBERG AFB GROUND SYSTEM CONSTRUCTION, EQUIPMENT INSTALLATION, AND CHECKOUT CONTINUE TOWARD THE OCTOBER 1985 FIRST LAUNCH. THE LAUNCH PROCESSING CONSTRUCTION WHICH INCLUDES THE LAUNCH CONTROL CENTER, LAUNCH PAD, EXTERNAL TANK PROCESSSING AND STORAGE FACILITY, SOLID ROCKET BOOSTER PROCESSING FACILITIES, AND ORBITER CHECKOUT AND MAINTENANCE FACILITIES IS 95 PERCENT COMPLETE. GROUND SYSTEM TESTING TO CHECKOUT FACILITY EQUIPMENT IS SCHEDULED TO BEGIN IN MAY. FLIGHT HARDWARE COMPATIBILITY TEST USING ENTERPRISE WILL BEGIN IN NOVEMBER. THE ACTUAL FLIGHT ORBITER--DISCOVERY--WILL ARRIVE IN MAY 1985. VANDENBERG IS DESIGNED TO SUPPORT THREE LAUNCHES IN FY86 AND FOUR LAUNCHES PER YEAR THEREAFTER. FOR THE FY86 LAUNCHES, NASA WILL PROCESS AND CHECKOUT THE ORBITERS AND EXTERNAL TANKS AT KENNEDY SPACE CENTER. AFTER FY86, THOSE FUNCTIONS WILL TRANSFER TO VANDENBERG FOR WEST COAST LAUNCHES. FOR FY85 WE ARE REQUESTING $463 MILLION TO COMPLETE THE FACILITY CONSTRUCTION AND EQUIPMENT ACQUISITION, CHECKOUT AND TEST PRIOR TO THE FIRST FLIGHT IN OCTOBER 1985.

WE ARE CONTINUING TO WORK THE IUS PROBLEM AND FEEL CONFIDENT WE HAVE IDENTIFIED THE FAILURE IN THE SECOND STAGE MOTOR. DESIGN MODIFICATIONS ARE IN WORK. WE ARE PLANNING FOR A FLIGHT CAPABILITY

LATE THIS YEAR. RELATED TO THE IUS PROBLEM IS THE RECENT NOTIFICATION ON FEBRUARY 6TH BY THE SECRETARY OF THE AIR FORCE THAT THE IUS WOULD EXCEED ITS BASELINE UNIT COST BY MORE THAN 50 PERCENT. OF THIS 50 PERCENT INCREASE APPROXIMATELY 8 PERCENT CAN BE ATTRIBUTED TO THE IUS ANOMALY. THE PRIMARY CAUSE OF THE UNIT PRICE INCREASE IS THE QUANTITY REDUCTION FROM 18 TO 10 CAUSED BY THE TRANSITION TO CENTAUR OF MILSTAR AND OUTYEAR DSCS AND DSP.

THE CENTAUR IS A HIGH PERFORMANCE CRYOGENIC UPPER STAGE BEING DEVELOPED JOINTLY BY NASA AND THE AIR FORCE. THERE ARE TWO VERSIONS: THE G PRIME FOR NASA INTERPLANETARY MISSIONS IS THE SAME BASIC DESIGN AS CENTAURS FLOWN ON THE ATLAS AND WILL DELIVER APPROXIMATELY 14,000 POUND PAYLOADS TO GEOSYNCHRONOUS ORBIT. THE G VERSION IS FOR DOD MISSIONS. IT IS A SHORTER VERSION THAN THE G PRIME THUS ALLOWING FOR LARGER VOLUME PAYLOADS IN THE SHUTTLE CARGO BAY, AND WILL PROVIDE 10,000 POUNDS TO GEOSYNCHRONOUS ORBIT. THE JOINT PROGRAM OFFICE IS AT NASA'S LEWIS RESEARCH CENTER. THE FIRST LAUNCH IS SCHEDULED FOR MAY 1986 - A GALILEO PLANETARY MISSION. THE FIRST DOD CAPABILITY WILL BE IN THE FALL OF 1987. OUR COST IS IN LINE WITH OUR ORIGINAL ESTIMATE, WITH THE AIR FORCE SHARE OF THE DEVELOPMENT COSTS LESS THAN $150M. THE OVERALL PROGRAM IS ON SCHEDULE WITH ALL PROGRAM COSTS TRACKING THE ESTIMATES VERY WELL.

SPACE SYSTEMS

SPACE SYSTEMS PERFORM MANY MISSIONS MORE EFFECTIVELY THAN EARTHBOUND SYSTEMS. SPACEBORNE SURVEILLANCE, WARNING COMMUNICATIONS, METEROLOGICAL AND NAVIGATIONAL SYSTEMS INCREASE THE EFFECTIVENESS OF MILITARY OPERATIONS. I WOULD NOW LIKE TO BRING THIS COMMITTEE UP-TO-DATE ON A NUMBER OF THESE IMPORTANT SPACE SYSTEMS.

WE ARE IN THE FOURTH YEAR OF A MULTIYEAR PROCUREMENT OF 28 GPS

PRODUCTION SATELLITES. FY82, 83 AND 84 FUNDED ADVANCE BUYS OF MATERIALS, PARTS, COMPONENTS, SUBSYSTEMS, LABOR AND DATA PLUS ONE SATELLITE. IN FY85 WE FULLY FUNDED COMPLETION OF SIX OF THE MULTIYEAR PROCUREMENT OF 28 GPS SATELLITES, AS WELL AS LIMITED SURVIVABILITY ENHANCEMENTS. BEYOND FY85 WE EXPECT TO BEGIN USER EQUIPMENT PROCUREMENT FOR THE NAVY AND THE ARMY. THE AIR FORCE QUANTITY PRODUCTION BEGINS IN FY86. THE BASELINE GPS MULTIYEAR PROGRAM REMAINS WITHIN THE $1.4 BILLION APPROVED BY CONGRESS.

IN NOVEMBER OF 1983 WE HAD THE LAUNCH OF OUR SECOND BLOCK 5D-2 DMSP SATELLITE. IN SEPTEMBER OF LAST YEAR CONTRACTS FOR THE MULTIYEAR PROCUREMENT OF FOUR SPACECRAFT AND SENSORS THAT YOU APPROVED FOR FY83, WERE NEGOTIATED WITHIN THE APPROPRIATED AMOUNT OF $245.6M. THIS REPRESENTED A SAVINGS OF $146.2M OVER THE TRADITIONAL ONE SPACECRAFT AND ONE SENSOR PER YEAR BUY. THIS SAVING RESULTS FROM A COMBINATION OF MULTIYEAR PROCUREMENT AND SCHEDULE ACCELERATION SAVINGS. OUR FY85 REQUEST OF $268.7M CONTAINS FUNDS FOR LASER HARDENING OF DMSP SPACECRAFT AND SENSORS AND BUILDING A HARDENED SATELLITE OPERATIONS CENTER. AS YOU MAY BE AWARE, NEITHER THE CURRENT SPACECRAFT, SENSOR OR GROUND SATELLITE OPERATION CENTER ARE HARDENED TO THE JCS CRITERIA. IN FY85 WE WILL ALSO BEGIN THE DESIGN, FABRICATION AND QUALIFICATION OF A SHUTTLE COMPATIBLE SPACECRAFT, WITH A SCHEDULED COMPLETION IN FY89.

IN FY85 THE PRODUCTION OF THE LAST SEVEN DSCS III SATELLITES WILL BEGIN AS A CONTINUATION OF THE MULTIYEAR PROCUREMENT IN FY84. THE $291.2M REQUESTED IN FY85 FULLY FUNDS THE PRODUCTION OF THE FIRST TWO OF THESE SATELLITES AND THE ECONOMIC ORDER QUANTITY PROCUREMENT OF ALL REMAINING PARTS AND SUBASSEMBLIES FOR THE SEVEN SATELLITES. THE $31.6M REQUESTED FOR RDT&E WILL COMPLETE FIRST TIME INTEGRATION OF THE DSCS III PRODUCTION SATELLITES ON THE SPACE SHUTTLE. IT ALSO COMPLETES DEVELOPMENT OF 40 WATT SOLID STATE AMPLIFIERS TO REPLACE

TRAVELING WAVE TUBES AND COMPLETES DEVELOPMENT OF FILTERS THAT WILL PROVIDE INCREASED CHANNEL BANDWIDTH FOR ADDITIONAL COMMUNICATIONS CAPACITY.

THE NEWEST COMMUNICATIONS SATELLITE PROGRAM, MILSTAR, HAS PROGRESSED FROM THE CONCEPT VALIDATION PHASE, WITH THE AWARD OF A FULL SCALE DEVELOPMENT CONTRACT THIS PAST JULY. WE ARE REQUESTING $325.0M IN RDT&E IN FY85 TO FUND BLOCK I PAYLOAD/SPACECRAFT DEVELOPMENT, PAYLOAD AND SHUTTLE INTEGRATION WORK, THE DEVELOPMENT OF FLIGHT VEHICLES #1 and #2 AND MISSION CONTROL ELEMENT DEVELOPMENT. THE INTEROPERABILITY ISSUE THAT CONGRESS HAS EXPRESSED CONCERN OVER HAS BEEN ADDRESSED BY THE DEPARTMENT. EFFORTS ARE EITHER UNDERWAY OR COMPLETED TO ENSURE INTEROPERABILITY. SOME PROBLEMS DO STILL EXIST STILL WITH I/O DEVICES AND UNIQUE PROTOCOLS, BUT WE WILL CONTINUE TO WORK THESE OUT. ALSO, I AM HAPPY TO REPORT THAT TERMINAL AND SATELLITE SCHEDULES ARE COMPATIBLE CONTRARY TO SOME MISCONCEPTIONS THAT THEIR SCHEDULES WERE INCOMPATIBLE. WHEN THE MILSTAR SYSTEM PROVIDES WORLDWIDE COVERAGE THE TERMINALS WILL BE IN PLACE.

SPACE SURVEILLANCE AND DEFENSE

THE DOD SPACE SURVEILLANCE AND SPACE DEFENSE PROGRAM CONSISTS OF FOUR PRINCIPAL ELEMENTS: IMPROVING SURVEILLANCE, DEVELOPING AN ANTISATELLITE (ASAT) SYSTEM, INCREASED SURVIVABILITY AND ENHANCING C^3. WITH REGARD TO SURVEILLANCE IMPROVEMENTS, WE ARE REQUESTING A TOTAL OF $35.8M IN FY85 FOR OUR SPACETRACK PROGRAM TO COMPLETE THE UPGRADE OF GEODSS. THIS PROGRAM FOCUSES ON IMPROVING OUR ABILITY TO MONITOR DEEP SPACE ACTIVITIES AND ALSO INCLUDES REFURBISHMENT OF RADAR SENSORS AND IMPLEMENTATION OF AN IMPROVED RADAR CALIBRATION CAPABILTIY TO PROVIDE FUTURE SUPPORT TO OUR SPACE DEFENSE SYSTEM.

TO DETER THREATS TO OUR SPACE SYSTEMS AND, WITHIN LIMITS IMPOSED BY INTERNATIONAL LAW, TO COUNTER CERTAIN SATELLITES WHICH

PROVIDE SUPPORT FOR HOSTILE MILITARY FORCES HAS LED US TO DEVELOP OUR ASAT SYSTEM. THE U.S. SYSTEM PRESENTLY UNDER DEVELOPMENT CONSIST OF MINIATURE VEHICLE (MV) MOUNTED ON A TWO-STAGE SRAM/ALTAIR BOOSTER. THIS IS CARRIED ALOFT AND LAUNCHED FROM A SPECIALLY MODIFIED F-15 AIRCRAFT. TO DATE WE HAVE HAD A SUCCESSFUL BOOSTER TEST AND PLAN TO CARRY OUT AN ADDITIONAL TEST IN THE FALL.

THE SOVIETS ENORMOUS POTENTIAL FOR ELECTRONIC INTERVENTION COUPLED WITH THEIR DEMONSTRATED ANTISATELLITE CAPABILITIES REQUIRE WE TAKE PRUDENT STEPS TO DEFEND OUR SATELLITES. IN THE SATELLITE SYSTEMS SURVIVABILITY PROGRAMS WE ARE DEVELOPING TECHNOLOGY AND PROCEDURES WHICH CAN BE USED TO INCREASE THE SURVIVABILITY OF OUR SATELLITES ALONG WITH THEIR COMMUNICATION LINKS AND GROUND STATIONS. IN FY85 WE ARE CONTINUING WITH THESE EFFORTS TO DEVELOP LONG-TERM SURVIVABILITY REQUIREMENTS.

THE LAST ELEMENT OF OUR OVERALL SPACE SURVEILLANCE AND DEFENSE PROGRAM PROVIDES THE VITAL COMMAND, CONTROL AND COMMUNICATIONS TO EFFECTIVELY INTEGRATE AND MANAGE ALL SPACE DEFENSE RESOURCES. IN CONCERT WITH PRESIDENTIAL DIRECTION AND THE EVOLVING ROLE OF THE NORTH AMERICAN AEROSPACE DEFENSE COMMAND (NORAD) IN SPACE, THE SPACE DEFENSE OPERATIONS CENTER PHASE IV (SPADOC IV) PROGRAM CONTINUED. THIS PROGRAM WILL PROVIDE CINCNORAD WITH AN AUTOMATED CAPABILITY TO DETECT AN ATTACK UPON VITAL U.S. SATELLITE ASSETS AND TO WARN THE NATIONAL COMMAND AUTHORITY AND SATELLITE OWNERS/OPERATORS OF THE PENDING THREAT. BASICALLY, WE ARE AUTOMATING A CURRENT ALL MANUAL SYSTEM.

OTHER STRATEGIC DEFENSE

ONE OTHER PROGRAM WORTH MENTIONING IS THE DEFENSE SUPPORT PROGRAM OR DSP. DEVELOPMENT EFFORTS ARE DIRECTED FIRST AT INCREASING THE SURVIVABILITY OF OPERATIONAL DATA BY DESIGNING

GROUND STATION MODIFICATIONS FOR COMPATIBILITY WITH THE SURVIVABILITY IMPROVEMENTS OF FOLLOW-ON SATELLITES AND SECOND WITH INTEGRATING THESE SATELLITES WITH THE SPACE SHUTTLE. IN FY85 WE WILL COMPLETE PROCUREMENT OF THE MOBILE GROUND TERMINALS BEGUN IN FY82, WHICH DO THE ACTUAL DATA PROCESSING AND WILL COMPLETE PHASE I IN DEVELOPING THE MOBILE COMMUNICATION TERMINAL, WHICH PROVIDES THE PRIMARY, HARDENED, JAM RESISTANT LINK TO THE USERS. WE WILL ALSO CONTINUE WITH INTEGRATION OF DSP SATELLITES ON THE SPACE SHUTTLE.

SUPPORTING RESEARCH AND TECHNOLOGY

WE ARE CONTINUING TO EXPAND SPACE-RELATED R&D WITHIN THE DEPARTMENT OF DEFENSE TO ENSURE THAT WE ARE NOT TECHNOLOGICALLY SURPRISED BY ANY ADVERSARY, TO ADVANCE OUR OWN CAPABILITIES IN SPACE, AND TO IMPROVE THE SURVIVABILITY OF FUTURE SPACE SYSTEMS. IN FY85 WE HAVE REQUESTED $1.3 BILLION FOR DEFENSE R&D SPACE RELATED PROGRAMS. THIS REPRESENTS A REAL GROWTH OF 17 PERCENT RELATIVE TO THE $1.1 BILLION APPROPRIATED IN FY84.

WE ARE INVESTIGATING A WIDE RANGE OF SPACE TECHNOLOGIES TO MAINTAIN OUR PRESENT LEAD OVER THE SOVIETS IN SELECTED AREAS. THE FOLLOWING ARE SOME WHICH OFFER CONSIDERABLE PROMISES.

THE TRI-SERVICE SPACE TEST PROGRAM (STP) PROVIDES THE MEANS TO TEST NEW CONCEPTS BY INVESTIGATING THE EFFECTS OF THE SPACE ENVIRONMENT ON OUR SYSTEMS. FY 1985 FUNDING FOR THIS PROGRAM SUPPORTS THE SPACEFLIGHT OF THREE PRIMARY EXPERIMENT MISSIONS AND 15 SECONDARY PAYLOADS.

TEAL RUBY IS A SPACE-BASED EXPERIMENT TO EVALUATE INFRARED (IR) SURVEILLANCE FOR THE DETECTION OF AIRCRAFT TARGETS AGAINST THE EARTH'S CLUTTER BACKGROUND. IN ADDITION, TEAL RUBY WILL PROVIDE PROOF-OF-CONCEPT FOR OTHER MULTI-MISSION SURVEILLANCE

FUNCTIONS, DEVELOP A COMPREHENSIVE AND GLOBAL RADIOMETRIC BACKGROUND DATA BASE, AND SPACE QUALIFY FIRST GENERATION ADVANCED IR SENSOR SURVEILLANCE TECHNOLOGY.

THE TEAL RUBY EXPERIMENT REPRESENTS THE FIRST LARGE-SCALE IMPLEMENTATION OF A TWO-DIMENSIONAL STARING MOSAIC IR DETECTOR ARRAY AND WILL ALSO USE THE LIGHTWEIGHT TECHNIQUES DEVELOPED IN THE HALO TECHNOLOGY PROGRAM FOR DESIGN AND MANUFACTURE OF THE TEAL RUBY TELESCOPE. IT IS SCHEDULED FOR SHUTTLE LAUNCH AND WILL OPERATE IN SPACE FOR A MINIMUM OF ONE YEAR. TOWARD THIS END, THE TEAL RUBY QUALIFICATION TEST PROGRAM WAS COMPLETED, RESULTING IN A HIGHLY SUCCESSFUL RADIOMETRIC TEST IN A SPACE CHAMBER. THE TEST PROVIDED THE FIRST COMPREHENSIVE SYSTEM-LEVEL PERFORMANCE DATA, AND PROVIDED THE KEY INPUTS FOR MISSION PLANNING AND SOFTWARE DEVELOPMENT.

MANY OF THE ADVANCED SPACE TECHNOLOGIES BEING DEVELOPED WILL REQUIRE SUBSTANTIALLY MORE POWER IN SPACE THAN PROJECTED TO BE AVAILABLE FROM SOLAR ARRAY TECHNOLOGIES, PARTICULARLY THE SDI. THE SPACE POWER PROGRAM AS DEFINED BY DOD WILL WORK IN TWO DIFFERENT REGIMES. THE FIRST IS DEVELOPMENT OF TECHNOLOGY FOR SURVIVABLE, CONTINUOUS OPERATION SPACE NUCLEAR POWER SYSTEMS IN THE 10 TO 1000 KW RANGE. THIS IS EXPECTED TO GROW TO A FEW MEGAWATTS OF CONTINUOUS POWER FOR SOME OF THE SDI APPLICATIONS. THE SECOND IS A LONG RANGE RESEARCH PROGRAM TO PROVIDE MUCH HIGHER POWER LEVELS--PERHAPS HUNDREDS OF MEGAWATTS--FOR SHORT BURSTS OF HUNDREDS OF SECONDS. THE SPACE POWER PROGRAM IS CONSIDERING BOTH NUCLEAR AND NON-NUCLEAR ALTERNATIVES FOR THE MULTI-MEGAWATT BURST ASPECT OF THE PROGRAM.

APPLICATIONS FOR THE 100 KW CLASS (10-1000 KW, CONTINUOUS) PROGRAM ARE RELATIVELY NEAR TERM. I FEEL THAT THE FIRST APPLICATIONS OF SPACE NUCLEAR POWER IN THE 100 KW CLASS WILL LIE IN THREE BROAD AREAS. THE FIRST WOULD BE COMMUNICATION

SATELLITES FOR BOTH MILITARY AND COMMERCIAL USE. THE SECOND APPLICATION WOULD BE ADVANCED, HIGH POWER RADAR SATELLITES, AND THE THIRD AREA INVOLVES GROWTH VERSIONS OF NASA'S SPACE STATION WHICH WILL REQUIRE INCREASING POWER LEVELS FOR MANUFACTURING. THERE IS A WIDE RANGE OF ADDITIONAL APPLICATIONS INCLUDING SPACE SURVEILLANCE, TRACKING, DESIGNATION, CRYOGENIC SUPPORT, AND SO ON FOR BOTH SDI AND OTHER MILITARY USES.

FOR THE MULTI-MEGAWATT, BURST MODE SPACE POWER SYSTEMS, THE APPLICATIONS PRINCIPALLY INVOLVE FUTURE SPACE WEAPONS AS PART OF THE STRATEGIC DEFENSE INITIATIVE. SINCE THE APPLICATIONS ARE MUCH MORE DISTANT THAN FOR THE 100 KW CLASS, WE ARE STRUCTURING A LONG RANGE RESEARCH PROGRAM. WE DO NOT EXPECT TO SELECT A SPECIFIC SYSTEM FOR DEVELOPMENT UNTIL 1990 OR 1991 AT THE EARLIEST. UNTIL THAT TIME, WE WILL BE DEVELOPING THOSE NUCLEAR AND NON-NUCLEAR TECHNOLOGIES LEADING TO POTENTIAL ORDER-OF-MAGNITUDE INCREASE IN POWER AND RUN TIME AND A SIMILAR REDUCTION IN SYSTEM MASS AND COST. TECHNOLOGY RESEARCH WILL BE CONDUCTED IN HIGH TEMPERATURE MATERIALS, ENERGY STORAGE, REACTOR TECHNOLOGY, LIGHTWEIGHT MHD AND TURBOGENERATOR ENERGY CONVERTORS, AND ULTRALIGHTWEIGHT SPACE RADIATORS FOR EXCESS HEAT. THIS RESEARCH PROGRAM IS BEING PLANNED NOW FOR A START IN FY85.

ANOTHER MAJOR R&D PROGRAM THAT THE DEPARTMENT OF DEFENSE, SPECIFICIALLY, DARPA, HAS BEEN INVOLVED IN IS THE TRIAD PROGRAM. THIS ENTIRE PROGRAM HAS BEEN ASSIGNED TO PROGRAM ELEMENTS IN THE PRESIDENT'S STRATEGIC DEFENSE DIRECTIVE (SDI). THIS PROGRAM WILL BE DISCUSSED MORE FULLY IN THE TESTIMONY ON SDI TO BE PRESENTED LATER.

THIS CONCLUDES MY FORMAL STATEMENT MR. CHAIRMAN, I WILL BE PLEASED TO ACCEPT ANY QUESTIONS THE COMMITTEE MAY HAVE.

STATEMENT OF SENATOR PROXMIRE

Senator STEVENS. I understand that Senator Proxmire has a statement to make.

Senator PROXMIRE. Yes, and I would appreciate it, Mr. Chairman, if I could make it before General Abrahamson begins.

Senator STEVENS. All right.

STRATEGIC DEFENSE INITIATIVE PROGRAM

Senator PROXMIRE. Gentleman, I appreciate your coming before us today to talk about the Department of Defense space programs, which are called by some "Star Wars." The strategic defense initiative is without a doubt the most critical, and I would say, controversial defense initiative the administration has taken.

Ever since the signing of the Anti-Ballistic Missile Treaty in 1972, the United States and the Soviet Union have kept a lid on the production, testing, and deployment of missile defenses. It has been a ban both the Democratic and Republican administrations have supported. But this administration has decided to begin a complete reversal of this policy. With the implementation of this "Star Wars" program, we are taking a giant leap into the unknown, and once we take this leap there will be no turning back.

I look forward to your testimony today, but I can tell you right off the bat that words cannot describe the skepticism I have over this program. I think the conclusions reached by the Congressional Office of Technology Assessment report last month on directed energy missile defense in space sums up best my feelings about SDI.

OTA concluded that the prospect of a perfect or near-perfect defensive system being developed is so remote that it should not serve as the basis of public expectation or national policy about ballistic missile defense. In other words, "Star Wars" is best left to the movies.

No one knows where we will finally end up with this program, or what Pandora's boxes we will be opening, but I think three things are certain if we launch "Star Wars." First, the ABM Treaty, one of the most important arms control treaties signed with the Soviet Union, will be thrown in the trashcan.

Second, a new and dangerous arms race will be launched with the Soviet Union. Anyone who doesn't believe that there will be an arms race in defensive systems is ignoring history, which has given us three decades of U.S.-Soviet nuclear arms race.

Third, both sides will spend untold billions of dollars for a defensive system that may not give us a dime's worth of security. If ever there were a program that deserved my Golden Fleece Award, I think that the strategic defense initiative is it.

As a program for defending the country, "Star Wars" is so ridiculously bad that I cannot believe that the President seriously expects it to fly. This program, if carried out, will not defend the country, but it will accomplish something else. It will kill nuclear arms control.

It will drive a spike right through the heart of any basis for U.S.-Soviet agreement on limiting offensive missiles. it will leave nuclear arms control dead. Far more is riding on whether or not the

Congress agrees to fund this antiballistic missile system than disagreement on nulcear weapons policy. If Congress goes ahead, nuclear arms control will be dead for a very long time.

Thank you, Mr. Chairman.

VALIDITY OF SDI PROGRAM

Senator STEVENS. Senator, I am happy to give you the opportunity, which is your right, to make your statement. It is unfortunate that it is incorrect. I am cochairman of OTA, and there has been no OTA study. A consultant who was asked to make a report has made a report. There is a study going on now which will take several years for OTA to report.

This is not a partisan matter. This administration didn't start this. As a matter of fact, this committee authorized the space laser, the Army's ballistic missile defense concept, particle beam research. We have had surveillance acquisition tracking, space-based radar studies that were conducted in the previous administration, the Carter administration, this is ongoing.

The President has rightfully brought attention to the whole subject to try and bring it together, and to have an analysis of it, to see whether we ought to go ahead with a full blown program a la Manhattan-type project.

I couldn't disagree more with your statement, although I do defend your right to make your statement as you wish.

General Abrahamson.

STRATEGIC DEFENSE INITIATIVE ORGANIZATION

STATEMENT OF LT. GEN. JAMES A. ABRAHAMSON, DIRECTOR, STRATEGIC DEFENSE INITIATIVE ORGANIZATION

ACCOMPANIED BY FRANKLIN MILLER, DIRECTOR, STRATEGIC FORCES POLICY, OFFICE OF THE SECRETARY OF DEFENSE

OBJECTIVE OF SDIO

General ABRAHAMSON. Thank you, Mr. Chairman.

I have a rather extensive statement that does include a detailed layout of the funds requested. However, I would like to read only a very short portion of that, and by doing that maximize the time for questions. I would like to read at least some of the initial portion where we deal with the goals of the program. I will do my best to explain some of the differences between those goals and what a final objective might be.

In a speech to the American people a year ago, President Reagan offered the hope of a world made safe from the threat of ballistic missiles. More specifically, he stated, "our ultimate goal is eliminating the threat posed by strategic nuclear missiles, and our only purpose is to search for ways to reduce the danger of nuclear war."

President Reagan based this goal on recent technological advances which he believes offer us for the first time in history the opportunity to strengthen deterrence through effective defenses, rather than only through the threat of retaliation. He is determined that we exploit fully this opportunity, and I am convinced that he is right.

Secretary Weinberger recently selected me to be the program's director. I began acting in this capacity on April 16, and, of course, I am very pleased to be here today to testify before the subcommittee.

GOALS OF PROGRAM

My statement lays out an overview of the program, including its purpose and the funds, and a summary description of the research and technology efforts. However, I would like to first only emphasize the goal.

We are frequently asked whether the purpose of the strategic defense initiative is to defend people or military forces. Accomplishment of both missions is essential to the ultimate goal, which is to provide security for the people of the United States and our allies.

TECHNOLOGIES RESEARCH

The immediate objective, however, is to conduct research on those technologies which might enable the development of defensive systems capable of intercepting ballistic missiles after they have been launched, and prevent them from hitting their targets.

As an aside from the statement, sir, the ground rule is, of course, that research in technology be conducted within the limits defined in the Anti-Ballistic Missile Treaty, which is something that the Russians are already doing as well.

Once proven, these technologies could then be used for the design and development of an appropriate system of defenses. The highly effective defenses that we envision have three attributes which we believe would contribute to that ultimate objective.

First and foremost, an effective defense against ballistic missiles would improve stability and reduce the likelihood of war by eliminating the ability of ballistic missiles to support preemptive nuclear strikes.

Second, in the unlikely event, whether planned or accidental, that nuclear weapons would be used in the face of an effective ballistic missile and other defenses, such defenses would save lives and limit damage.

Third, by reducing the value of offensive nuclear forces, both military and economic incentives would be created for a negotiated offensive force reduction.

SDI GOALS

We are some times criticized for advocating conflicting SDI goals. Our goals are not, in fact, conflicting, however, confusion does arise when officials project SDI objectives for different time periods in the future. To put past statements in perspective, I believe that it is helpful to describe the goals of the programs in terms of a notional schedule for a postulated move to a future strategy which includes defense. For example, we might describe such a defensive evolution from today's sole dependence for deterrence on nuclear retaliation in the following steps: Again, I would emphasize that these are only notional time frames.

(*a*) The research phase: The period of time from the President's March 23, 1983, speech to the early 1990's when a decision on whether to enter systems development could be made by the President and the Congress.

(*b*) The systems development or full scale engineering phase: Assuming a decision to go ahead, the period of time beginning in the early 1990's, when prototypes of actual defensive systems and components are designed, built, and tested.

(*c*) The transition phase: The period of incremental, and sequential deployment of defensive systems. It is our intention that each added increment, in conjunction with effective and survivable offensive systems, would increase deterrence and reduce the risk of nuclear war. During this period, as the United States and the Soviet Union deploy defenses against ballistic missiles that progressively reduce the value of such missiles, significant reductions in nuclear ballistic missile could hopefully be negotiated and implemented.

(*d*) The final phase: The period of time during which deployments of highly effective multiphased defensive systems are completed, and which ballistic missile force levels reach their negotiated nadir. This is the goal expressed in the President's March 23, 1983 speech. If similar technical progress in defense against other means of nuclear attack have also been attained by this time, such defenses could also be incorporated. The most difficult, and therefore pacing, nuclear weapon to defend against is the ballistic missile. Hence, defense against it is the specific objective of the programs collected under the SDI label.

I would like to make a special point of the fact that our research is focusing on defenses against ballistic missiles of all ranges, including tactical and theater range systems, as well as ICBM's and sub-launched ballistic missiles. We are not seeking only to build defenses for the United States. As Secretary Weinberger has indicated, our concept of an effective defense is one which protects our allies as well as the United States.

SOVIET EFFORTS IN BALLISTIC MISSILE DEFENSE AREA

Finally, I must underscore the Soviet efforts in the ballistic missile defense area. The evidence of massive Soviet investments and programs is overwhelming. Were they to deploy the fruits of their programs unilaterally, the consequences to our national security would be exceedingly grave. However, a U.S. program capable of responding to Soviet deployments could lead to a safer world, with deterrence increasingly based on effective defenses for both sides.

PROPOSED FUNDING

At this point, I would like to depart and submit the rest of this for the record. I would ask, for reference, that we put the chart that is an attachment to the statement, which does show our proposed funding. I would like to make one point about the funding.

The funding is built on the programs that you mentioned, Mr. Chairman, that were previously embarked upon by the various services, the Defense Nuclear Agency, and the Department of Energy.

You can see that in fiscal 1984, nearly $1 billion had been allocated to those programs. Prior to the President's speech, and prior to defining this long range goal which would focus our research and development effort, the services planned to increase that funding dramatically, by approximately 50 percent to the $1.5 billion.

After the President's speech, and after the time that we had a major scientific and technical review by the Fletcher Commission of this objective, of the practicality of applying some of these new technologies to this problem, it was found that there are certain holes in that program. A minimum amount was added, approximately $250 million, so that we could, then, have a balanced program which is the basis for our approximately $1.75 billion total program request.

TECHNOLOGIES

I think that it is valuable to recognize that before the speech, and before we have tried to focus the technologies, the services did make their independent judgments, and essentially they voted for this technology, but it was not focused as it has been since the time that we built the program.

I have been with the program for only a short period of time, but I would like to try to bring my own personal orientation and put it on the record here.

In my career, I have had the great privilege of being associated with what this country and our allies can do in a series of technical programs, both within the Department of Defense and, most recently, in the shuttle program for NASA. I have seen that time after time, we can set a tactical goal and it is within our capability to go out and attain it.

Although I am not expert in each of the technologies here, I have been a student of many of these technologies, and I do believe that the ultimate program is one that over a period of time is doable. Our challenge right now is to march out in the research and technology phase. We need to select things that are not only doable options for a future President, and options that are not only technically feasible, but options that are affordable as well, and to marry those options with a strategy for arms control and very broad discussions, so that we will achieve this phased approach, so that future Presidents and Congress could look and say that the first option that we would put out and try to develop would indeed add to stability in the world. That is a difficult challenge, one that we don't know now, in fact, what each step along the way will be, but it is one that we know we can do.

Perhaps, I think, the best endorsement of the program has been levied by the many people who have been asking me to come and work on this program. I have applications from all over, from many communities that have not been heard from before. I think they are best summed up by a NASA astrophysicist, who in the past has been working only in the areas of pure science. By the way, he never worked for me in the past, so I don't think that that is the issue.

He came to me and said that he would like to work on the program because, first of all, it is technically exciting and he thinks that he can contribute, but most of all for his children's sake. I think that sums it up very well.

With that, Mr. Chairman, I am available for your questioning.

[The prepared statement of General Abrahamson follows:]

PREPARED STATEMENT OF LT. GEN. JAMES A. ABRAHAMSON

DIRECTOR

STRATEGIC DEFENSE INITIATIVE ORGANIZATION

THE PRESIDENT'S STRATEGIC DEFENSE INITIATIVE (SDI)

INTRODUCTION

In a speech to the American people a year ago, President Reagan offered the hope of a world made safe from the threat of ballistic missiles. More specifically, he stated, "Our ultimate goal ... (is) eliminating the threat posed by strategic nuclear missiles," and "our only purpose ... is to search for ways to reduce the danger of nuclear war."

President Reagan based this goal on recent technological advances which, he believes, offer us, for the first time in history, the opportunity to strengthen deterrence through effective defenses, rather than only through the threat of retaliation. He is determined that we exploit fully this opportunity. I am convinced he is right.

Secretary Weinberger recently selected me to be the program's director. I began acting in this capacity on April 16, and I am pleased to be here today to testify before this subcommittee. I would like to give you a general overview of the program, including its purpose, the funds we are requesting, and a summary description of the research and technology efforts we propose to pursue.

THE GOAL OF THE SDI

We are frequently asked whether the purpose of the Strategic Defense Initiative (SDI) is to defend people or military forces. Accomplishment of both missions is essential to the ultimate goal, which is to provide security for the people of the United States and our allies. The immediate objective is to conduct research on those technologies which might enable the development of defensive systems capable of intercepting ballistic missiles after they have been launched and preventing them from hitting their targets.

Once proven, these technologies could be used for the design and development of an appropriate system of defenses. The highly effective defenses that we envision have three attributes which, we believe, would contribute to the ultimate objective. First and foremost, an effective defense against ballistic missiles would improve stability and reduce the likelihood of war by eliminating the ability of ballistic missiles to support preemptive nuclear strikes. Second, in the unlikely event--whether planned or accidental--that nuclear weapons would be used in the face of effective ballistic missile and other defenses, such defenses would save lives and limit damage. Third, by reducing the value of offensive nuclear forces, both military and economic incentives would be created for negotiated offensive force reductions.

We are sometimes criticized for advocating conflicting SDI goals. Our goals are not in fact conflicting; however, confusion does arise when administration officials project SDI objectives for different time periods in the future. To put past statements in perspective, I believe it is helpful to describe the goals of the program in terms of a notional schedule for a postulated move to a future strategy which includes defense. For example, we might describe such a defense evolution from today's sole dependence for deterrence on nuclear retaliation in the following notional steps:

a. The Research Phase: The period of time from the President's March 23, 1983, speech to the early 1990's when a decision on whether to enter systems development could be made by the President and Congress.

b. The Systems Development (or Full Scale Engineering Development) Phase: Assuming a decision to go ahead, the period of time beginning in the early 1990s when prototypes of actual defensive system components are designed, built, and tested.

c. The Transition Phase: The period of incremental, sequential deployment of defensive systems. It is our intention that each added increment, in conjunction with effective and survivable offensive systems, would increase deterrence, and reduce the risk of nuclear war. During this period, as the U.S. and Soviet Union deploy defenses against ballistic missiles that progressively reduce the value of such missiles, significant reductions in nuclear ballistic missiles would be negotiated and implemented.

e. The Final Phase: The period of time during which deployments of highly effective multi-phased defensive systems are completed and during which ballistic missile force levels reach their negotiated nadir. This is the goal expressed in the President's 23 March 1983 speech. If similar technical progress in defense against other means of nuclear attack has been attained by this time, such defenses could also be incorporated. The most difficult, and therefore pacing, nuclear weapon to defend against is the ballistic missile; hence, defense against it is the specific objective of the programs collected under the SDI label.

I want to make a special point of the fact that our research is focusing on defenses against ballistic missiles of all ranges, including tactical and theater range systems as well as ICBM's and SLBM's. We are not seeking only to build defenses for the United States. As Secretary Weinberger has indicated, our concept of an "effective" defense is one which protects our Allies as well as the United States.

I must underscore Soviet efforts in the ballistic missile defense area. The evidence of massive Soviet investments and programs is overwhelming. Were they to deploy the fruits of their programs unilaterally, the consequences to our national security would be exceedingly grave. However, a U.S. program capable of responding to Soviet deployments could lead to a safer world, with deterrence increasingly based on effective defenses for both sides.

FUNDING

We plan an aggressive, adequately funded program to pursue the relevant technologies at the maximum reasonable rate. For fiscal year 1985 we are requesting approximately $2 billion (total for DoD and DoE). We anticipate that during the fiscal year 1986-89 period, approximately $24 billion will be required.

The program is not a "new start" in the usual sense. Substantially all of the relevant technologies have been funded in previous years, but not all have been specifically related to defending against ballistic missiles. To implement the President's Strategic Defense Initiative, we have focused these previously existing related research efforts into a single program, and augmented the previously planned level of DoD funding for fiscal year 1985, $1,527 million, by $250 million, for a total request of $1,777 million. The DoD request is for 71% real growth in relevant technologies from fiscal year 84 to 85, and 16% relative to pre-SDI plans for fiscal year 1985. Part of the Initiative includes technologies involving nuclear devices, which are developed by the Department of Energy. Their work in direct support of this initiative in fiscal year 1985 is a portion of their nuclear research, development, and test funding. It is estimated at $210 million (It is not a separate, specific line item.) for a total program of $2 billion.

The DoD portion of the program has been divided into five technical areas, and a new program element has been established for each of them. These program elements are:

1. Surveillance, acquisition, and tracking,
2. Directed energy weapons,
3. Kinetic energy weapons,
4. Systems analyses and battle management, and
5. Support programs.

These are Defense level program elements. Their descriptions are found in the Defense Agencies book of RDT&E descriptive summaries. A funding summary is shown in the chart on page 10.

THE CONCEPT OF DEFENSE

The flight of a ballistic missile can be considered in four phases. The first is the boost phase, in which the first and second stage rocket engines of the missile are burning. They produce an intense and unique infrared signature. In the second, or post-boost phase, the bus separates from the main engines and the multiple warheads are deployed from the bus, along with any penetration aids such as decoys and chaff. In the third, or mid-course phase, the multiple warheads and penetration aids travel on ballistic trajectories through space, above the earth's atmosphere. In the fourth, terminal phase, the warheads and penetration aids reenter the earth's atmosphere, where they are affected by atmospheric conditions.

Our program seeks to explore technologies enabling the engagement of attacking missiles in all four phases of their flight. This would require a number of capabilities, including global, full-time surveillance to warn of an attack. There is leverage in engaging the missiles in the boost phase, because the multiple warheads and penetration aids have not yet been been deployed. After deployment, we must be able to discriminate warheads from decoys, so we can target only the real threats. We must be prepared for the attacking warheads to be salvage fuzed; therefore, our terminal defenses must engage them at as high an altitude as possible. And in addition to the individual engagement capabilities, we must have a survivable battle management system capable of efficient, global control.

The technologies for the terminal defenses are also likely to be applicable to defense against the shorter range nuclear ballistic missiles, such as submarine launched ballistic missiles and theater range ballistic missiles, which may not have trajectories high enough to permit their attack with exoatmospheric systems, and which have short times-of-flight. Such technologies are important for defense of our allies.

THE TECHNOLOGIES

Surveillance, acquisition, and tracking:

Surveillance, acquisition, tracking and kill assessment (SATKA) includes sensing of information for initiation of the defense engagement and for battle management and assessment of the status of forces before and during a defense engagement against nuclear ballistic missiles. It also includes signal processing and data processing for discrimination of threatening reentry vehicles from other objects and backgrounds. A crucial philosophy of design is that surveillance and acquisition should be autonomous in each phase of the engagement, but that tracking and kill assessment should be consultative through battle management. These requirements are necessary so that the contributions to leakage from missed detections remain independent to insure very high quality tracking and kill assessment.

The goal of this program is to develop and demonstrate the capabilities needed to detect, track, and discriminate objects in all phases of the ballistic missile trajectory. The technology developed under this program is quite complex, and any eventual system must operate reliably even in the presence of disturbances caused by nuclear weapons effects or direct enemy attack.

This program has several component technology development programs which culminate in hardware demonstrations. A focused effort to study the observables during each phase is the first major element of the program. Optical, infrared, and radar signatures of reentry vehicles and penetration aids will be measured. The new techniques of radar imaging represent another element. Similarly, optical imaging, using lasers rather than radar beams, will be pursued. Finally, a substantial effort is included to develop cooled infrared sensors and near real-time signal processing.

The technology programs outlined above will lead to a series of hardware demonstrations. Four key demonstrations have been identified at this time, with the possibility of more in the 1990s as technology progresses. One demonstration will be an advanced boost-phase detection and tracking system. Another major demonstration is designed to track and discriminate attacking objects in mid-course using advanced Long Wavelength Infrared (LWIR) sensors. The ability of airborne infrared sensors to identify and track reentering objects will be demonstrated in the Army's Airborne Optical Adjunct (AOA) development program. Ground radar imaging and tracking demonstrations will continue as part of the Army's terminal and midcourse defense programs. As other technologies mature, such as radar and optical imaging, new demonstrations will be conducted. As these demonstrations are completed, we will have obtained the technical information required to decide whether defensive systems of the necessary capability can be built, considering this key element of the defense design.

Directed Energy Weapons:

This program pursues four basic concepts identified as potentially capable of meeting a responsive threat--space-based lasers, ground-based lasers, space-based particle beams, and nuclear driven directed energy weapons. It also provides for establishment of the National Tri-Service Laser Test Range at White Sands Missile Range, NM. The basic technical thrusts include beam generators (lasers and particle accelerators), beam control, large optics, and acquisition, tracking and pointing. Our request includes funds to search for technological opportunities for new and innovative capabilities.

The goal of the directed energy technology program is to bring the most promising concepts for boost and post-boost phase intercept to an equivalent technical maturity in the early 1990's. At that point we expect to be able to demonstrate a readiness for technology validation in system level demonstrations of the concepts selected to move into that phase. To achieve that goal we plan to demonstrate the feasibility of the leading candidate beam generators by the mid 1980's and their scalability to weapon performance levels in the late 1980's or early 1990's. In beam control we will demonstrate by the end of the decade a capability to control wavefront errors, maintain beam alignment within the system, compensate for atmospheric effects; and provide the components necessary to transmit and control the high intensity beams. In large optics, we plan by the 1990's to demonstrate several approaches for providing the large diameter ground and space-based optics required for most directed energy concepts and all surveillance systems employing optical and electro-optical sensors. In our acquisition, tracking and pointing efforts, we envision in-space tests that verify our capability to point with the necessary precision, to acquire and track targets of interest, and to provide early experiments in imaging and designation. Finally, we are considering integrated technology experiments to show that we can integrate the weapon subsystems with requisite efficiency. With these demonstrations completed we will have provided the basis for a decision whether we are ready to move into the more complex system level demonstrations required in the technology validation phase of R&D.

Kinetic Energy Weapons:

Kinetic energy weapons include interceptor missiles and hypervelocity gun systems. The primary roles for these weapons include (1) midcourse engagement of reentry vehicles not destroyed during boost or post-boost phases, and of post-boost vehicles that have not dispensed all of their RV's, (2) terminal (i.e. endoatmospheric) engagement of RV's not destroyed during the previous phases of their flight, (3) space platform defense against threats not vulnerable to directed energy weapons, and (4) boost-phase engagement of short time-of-flight, short range submarine launched ballistic missiles. Additional roles for these weapons include (1) boost phase intercept from space-based platforms, and (2) midcourse engagement from space-based platforms. The kinetic energy weapons will rely on nonnuclear kill mechanisms to destroy the intended target. The key technologies required to develop these weapons include (1) fire control, (2) guidance and control, (3) warheads and fuzing for guided projectiles capable of being launched by missiles or hypervelocity guns, (4) hypervelocity launchers, (5) and high performance interceptor missiles.

The goals of the kinetic energy weapons program are: (1) expansion of the technology data base to support the development of improved and advanced weapons and (2) development and flight demonstration of kinetic energy weapons which are designed to satisfy the SDI mission needs outlined above. Technology programs are planned for endoatmospheric and exoatmospheric interceptor designs, a hypervelocity launcher design, and the systems engineering and analysis required to integrate the various advanced subsystems and components into effective system constructs. Investigations will also be undertaken in novel and advanced techniques which have the potential for a high payoff in performance and/or cost effectiveness in the design of these weapons systems. Hardware development and flight test demonstration of a number of kinetic energy weapons system designs will also be undertaken as part of this program.

Systems Analyses and Battle Management:

This program has been divided into two technology projects. The Battle Management/Command, Control, and Communications technology project will develop the technologies necessary to allow eventual implementation of a highly responsive, ultra reliable, survivable, endurable and cost effective BM/C^3 system for a low-leakage defense system. This BM/C^3 system is expected to be quite complex and must operate reliably even in the presence of disturbances caused by nuclear effects or direct enemy attacks. This program seeks to (1) develop the tools, methods, and components necessary for development of the BM/C^3 system, and (2) quantify the risk and cost of achieving such a BM/C^3 system to control the complex, multi-tiered SDI system. The systems analyses project will provide overall SDI systems guidance to weapons, sensors, C^3, and supporting technologies. Tasks include threat analyses, mission analyses, concept formulation, system conceptual design, and subsystem requirements definition, system evaluation, and technology assessment for all levels of a multi-tiered, low-leakage system.

One of our early tasks will be to conduct a "sanity check" on the defense responsibilities allocated to the various phases of the multi-tiered system by the Defensive Technology Study. Even though we know that many of our weapons and sensor concepts will require orders of magnitude performance improvements to accomplish the President's defense objectives, we also know that effective overall system guidance will efficiently focus these technology efforts and help us avoid "gold plating" and "blind alleys."

Obviously, if such a defense system were deployed, it would require positive control of its operations. We have to be sure that we can turn the system on when it is needed and turn it off when it is not. Just as importantly, the system must not be regarded as a "paper tiger" by the Soviets if it is to serve as an effective deterrent to nuclear war. Therefore, its credibility must be based on a demonstrated capability to manage the surveillance, tracking and intercept actions over the multi-tiers of this complex system. The information processing capability, specifically the development of complex software packages, necessary to associate outputs from multiple sensors, performing discrimination and designation, and "birth to death" tracking, plus kill assessment is expected to stress software development technology.

Our immediate need is for effective approaches and tools for achieving high performance processors and software, and responsive communications networks that provide high reliability and fault tolerance. Evaluation and demonstration of this complex defense system and its C^3 will largely depend upon simulation. Therefore, development of effective modeling and simulation tools will also be an early priority endeavor.

Support Programs:

This program element funds a collection of essential efforts designed to provide timely answers to a variety of critical SDI support related questions. The Defensive Technologies Study (the report of the Fletcher panel) identified two areas that should receive priority attention in the SDI program.

First, for each weapon concept under consideration, we must develop the ability to scientifically predict the minimum energy that will be required, in a variety of engagement scenarios, to kill unhardened, retrofit hardened, and responsively hardened Soviet systems. These data will have a large effect on our choice of candidate system concepts. The feasibility of SDI may well hinge on the results of these efforts. The Lethality and Target Hardening project of the Support Programs effort is structured to provide these data.

Second, the ability of any deployed ballistic missile defense system to survive in the face of dedicated attack and to continue to function effectively must be established. The concepts, technologies and tactics necessary to insure continued system effectiveness will be defined and developed under the Survivability element of Support Programs. The output from this effort will be fed into all other elements of the SDI--particularly into the Systems Concepts and Analyses efforts.

Additionally, support programs will fund development of the technologies necessary for improved space logistics capabilities. These include the advanced orbital transfer vehicle capabilities that SDI will likely require. We will also evaluate the technical feasibility and cost effectiveness of using extraterrestrial materials for certain SDI applications.

Many SDI system elements (weapons, sensors, etc.) will require large amounts of electrical power. The Power and Power Conversion element of support programs will fund concept definition and technology development for multimegawatt power systems. This effort will fully exploit the technologies being developed in the joint NASA, DoE, DARPA SP-100 program. Both nuclear and non-nuclear systems and technologies will be considered.

The Department of Energy's Contribution to the SDI program:

Although funded separately, the Department of Energy (DoE) program is integral to the overall Strategic Defense Initiative program. DoE funded efforts include concepts for nuclear driven x-ray lasers, survivability and lethality, and support subsystems. Other efforts, such as space-based neutral particle beam technology, are being performed by the DoE laboratories with DoD funds. A memorandum of understanding, to be signed by the Secretaries of Defense and Energy, is presently in coordination. It will establish specific relationships between the elements of DoD and DoE engaged in planning and execution of the SDI. In accord with current policy, the DoE will have primary responsibility for nuclear source development, and the DoD for applications, target acquisition, beam control, and pointing/tracking. The DoE laboratories have unique facilities and capabilities to address many aspects of these difficult problems.

MANAGEMENT

The Defensive Technologies Study (the Fletcher panel report) emphasized the importance of strong central management for the SDI. The Department of Defense is absolutely committed to this principal and I would like to outline how we are following this guidance.

We have established a Strategic Defense Initiative Organization to manage the SDI program. The Secretary of Defense intends that the director will report directly to him and will have overall responsibility for managing the program and reporting on its progress. In the next few weeks we will organize a highly centralized dedicated staff to proceed with this important effort.

We will also work to establish relationships with other agencies and organizations, both within and outside the Department of Defense, to facilitate progress on the program. The Senior Interagency Group-Defense Policy (SIG-DP) has overseen all efforts of the SDI to date. This group, chaired by the Deputy Secretary of Defense and including senior representatives from all US national security organizations, will continue to provide top level coordination and review of both our technology work and the political and military implications of strategic defense for the US and its allies. An SDI Executive Committee (EXCOM) consisting of the senior officers of the Services, Military Departments, Defense Agencies and components of the Office of the Secretary of Defense, and also chaired by the Deputy Secretary of Defense, has coordinated internal DoD efforts on the SDI. The EXCOM will continue in this capacity. In order to execute the program we will establish, in consultation with the Services and Defense Agencies, constructive relationships with those Service and Agency staffs. The charter further authorizes the establishment of a special SDI Advisory Panel consisting of scientific, industrial, and academic experts who will assist us and provide important independent assessment of our plans and research efforts. We will work with the Joint Chiefs of Staff and the Under Secretary of Defense for Policy in establishing mechanisms for assessing the strategy and policy implications of defensive capabilities. We will also work closely with the Under Secretary of Defense for Research and Engineering to coordinate SDI programs with other related DoD programs to avoid duplication of effort. Since a significant portion of the SDI will be conducted by the Department of Energy, we have a formal memorandum of understanding now in coordination to cover that Department's SDI work.

To carry the SDI through for the long-term there are three fundamental authorities which the director will have:

1. Establishment of streamlined channels of communication and direction with the Services and Agencies which will be conducting the work. Each Service and Agency will be asked to designate a single office of responsibility for its portion of the SDI. This will facilitate prompt response on the program.

2. Responsibility to the Secretary of Defense for the SDI planning, programing and budgeting system.

3. In consultation with the Service and Agency staffs, the Director will designate lead organizations, responsible for execution of the SDI projects and tasks. These projects and tasks have been centralized in five Program Elements which will be managed by the SDI staff. We will initiate reprogramings as required. We will seek class Determination and Findings authority

for the SDI, as well as simplified procedures for rapid and creative means of achieving program objectives.

The most important aspect of our management structure is the availability of top-notch dedicated people. I am already singularly impressed with the people with whom I will be working, both within the Office of the Secretary of Defense and within the Services and Agencies. I have every reason for confidence that these people will meet the challenge the President has set.

CONCLUSION

In conclusion, I am pleased to have the opportunity to contribute to making the President's vision a reality. He has outlined a strategy of hope for people all over the world and for future generations. We need your help and commitment to undertake this noble challenge. We are dedicated to a program that will provide our future leaders with options to enhance deterrence and stability by eliminating the threatening role that ballistic missiles play in our world. The mere promise of such options may remove the pall of fear and anxiety that overshadows our young and provide them with the confidence that their future need not be dominated by the overriding fear of nuclear destruction.

SPACE BUDGET AND PROGRAM

Senator STEVENS. Thank you very much, General.

On the space program, the space budget, and the request that we received, Dr. Cooper, I take it that that language you want with regard to contracts is really proposed legislative language, and you are looking primarily to the authorization committees for that.

Dr. COOPER. Yes.

Senator STEVENS. I think we will just stay out of that for now, at least that is my feeling, I don't know about the rest of the committee, and see what the authorization committees do. If they don't deal with the problem, we will, but we would like to see a budget request if it becomes our problem, because I think we will be able to handle it much better.

If it is not on an authorization bill, then it becomes a matter that is really a budgeting problem for the Appropriations Committee, and I think we would be better equipped to handle it if you could give us a budget request with specific language.

We do have the specific language request, but I think you understand our problem. I hope you do.

Dr. COOPER. I understand it completely, Mr. Chairman, and we are looking into the prospect of preparing such a request.

[The budget request language follows:]

PROPOSED LANGUAGE

Because of concerns expressed by Congress concerning the proposed innovative funding approach for procuring ten commercial expendable launch vehicles, the Department of Defense has reconsidered this recommendation that was forwarded to the Congress on April 6, 1984 by the Deputy Secretary of Defense. The DoD has decided to develop and procure expendable launch vehicles in a more traditional funding approach. Ten million dollars has been authorized by the Senate Armed Services Committee to begin the development with Senate encouragement to reprogram additional funds to the program to meet a 1988 ILC. Because of the change in the funding mechanism, the Air Force is returning, unopened, the three bids that were received as a result of the Request for Proposal [RFP] and is issuing an amendment to the original RFP that reflects the new funding approach. The revised development and acquisition plan will meet the concerns of Congress.

FUNDING FOR ONGOING PROGRAMS

Senator **STEVENS**. I have a couple of questions of you, General Abrahamson, and then I will yield to my good friend from Mississippi, who has been at this business much longer than I have.

If I understand your presentation, you have roughly added $250 million to an ongoing series of programs. As I mentioned, we have been familiar with those programs in the past. Can you tell us what the $250 million is supposed to accomplish? Is it possible to break that down and say: We are going to add this to this and this and this?

COUNTERMEASURES

General **ABRAHAMSON**. It falls in several different areas, sir. One of the very important ones is in the area of countermeasures. In order for a system like this to truly be effective, we must be confident that it cannot be taken out through some simple countermeasure scheme.

Therefore, while there are very fine technologies that offer the promise of truly being able to sustain many countermeasures effectively, we do need to do additional research in those areas. That is one of the important elements and ingredient for a future decision on whether or not to deploy any one particular component. That is one area.

In addition to that, work with some of the advanced technologies such as the directed beam weapons, the laser weapons, and particle beams, we have to do additional work on lethality, and how it is that those systems can effective destroy a missile or a RV.

While, again, there is very great promise here, and while we have seen lasers, for example, existing chemical lasers destroy drones, and destroy other missiles in flight, and destroy things in the atmosphere, there is additional work that needs to be done there. So the majority of it is aimed in that direction.

Some of it is unspecified in order to give us some flexibility. We have set aside 5 percent so that we can have the ability to move quickly where there is a very promising idea.

Those are the three main areas.

SPACE BASED LASER

Senator **STEVENS**. When President Carter outlined the space laser program, he had what I believe he called milestones, at the time, that they were looking for in terms of program goals.

Can you tell us, where are we now in that one element of your program, the space based laser, compared to those Carter program goals? Is that yours, Dr. Cooper?

Dr. **COOPER**. Yes, Mr. Chairman.

Most of the space laser programs were programs that were previously prosecuted in ARPA, the Advanced Research Projects

Agency, which I head. I can say that all three of the major programs, the triad programs, are on schedule, and the milestones are being met in those programs.

The significant funding increase that you saw, excluding the $250 million, is partly represented by the increased investments in those three programs as they move into substantial hardward development period. For instance, the big laser, Alpha, is now heavily into the fabrication area. We have a very large crew of people working at TRW to fabricate that laser, and the expenditure rate in fiscal year 1985 will be at or near its peak.

LODE PROGRAM

Similarly, in LODE, the Large Optics Demonstration Experiment, we will be moving into the fabrication period for LODE in fiscal year 1985, and the Talon Gold program, the long-range space acquisition, pointing and tracking program, we will be into the final design period in 1985, and beginning fabrication on key subcomponents.

In each case, these programs are on or very near the schedules which we projected in the past 2 years.

General **Abrahamson**. Yes, Bob. However, the chairman's request was relative to the early schedules that were laid out in previous administrations.

Can we comment on that or else answer that for the record, sir?

Dr. **Cooper**. Certainly, these programs have been ongoing for many years. When I came to ARPA, after the elections of 1980, those programs were in an intermediate stage of development. They had been underway for about 5 years already. Interestingly enough, the milestones that were set by the ARPA Program managers in the Carter administration have, by and large, been adhered to.

Coming into those programs, I discovered that they substantially underfunded. That is, the understanding of what would be required to complete the programs in my judgment was substantially less than I expected would be required. So I made comprehensive review of the finances in each of these programs and I added funding both in the 1982, 1983, and 1984 budget years over what had previously been thought to be required.

Interestingly enough, the estimates that we made in the 1981 time period have been borne out over the last 3 years, and those additional funds certainly were required to keep the programs on schedule. Essentially, by making these increased investments, we have kept the programs on schedule, and we expect that each of those programs will converge to the final testing in the 1987 and 1988 time period.

I want to point out that those were ARPA programs, and the milestones and schedules have been set for many, many years. In making his program judgments, General Abrahamson may find it desirable to make key changes in those programs. I don't believe that we should hold him to the milestones that have been set by ARPA in the past. I think he needs the flexibility to either expand the programs, contract them, or augment them in whatever way he feels is necessary to meet the increased goals that he has set for himself.

Senator **STEVENS**. I really have two more questions, but let me put them both into one question.

STATES OF TECHNOLOGY OPTIONS

I remember so well sitting with my good friend, Senator Stennis, and our former ranking member at that time Senator Young, and we had a classified briefing back some 6 or 7 years ago on this. It was laid out for us what we hoped to do in the initiatives that were being pursued.

I would like to know, have we abandoned any of the technology options that were laid out for us then. If that is classified, skirt it as best as you can, because we are not classified.

Second, the comments that are made to me are that there is too much redundancy in this total effort of yours. I guess it is really now, General. The whole examination involves too many options. Whether we have in the past abandoned any or not, we ought to now narrow it down and confine ourselves to some specific options that have a better chance of being available for pursuit in the 1990 timeframe.

Could either or both of you comment on that joint question, please?

General **ABRAHAMSON**. I would like to address the last part of it, sir. As to the first part, we will do our best to go back and to find that particular briefing, so that we can give you, for the record, a specific answer to your question.

[The information follows.]

SPACE PROGRAMS

We believe it is fair to say that in pursuing the key technologies for space lasers, we have in fact expanded our options for application of the technology while selecting the best approach among several technological paths. As closely as can be determined, the time Senator Stevens was referring to was approximately 1980. At that time the DARPA TRIAD was in early states of definition and development, and thus several technical approaches to meeting performance goals existed in all the programs. For example, the resonator configuration for the ALPHA Laser Device had not been selected and thus two major designs were being pursued. The LODE/LAMP program had not yet reached the decision point on whether to use a continuous face sheet for the large primary mirror or to pursue a more sophisticated segmented design. In the ensuing time period, all three programs have undergone a natural and pre-planned narrowing of options as the programs matured, risk was reduced, and preferred approaches selected. With the advent of the Strategic Defense Initiatives [SDI], the DARPA TRIAD programs have been absorbed and will actually be enhanced as part of the Space-Based Laser [SBL] portion of the SDI Directed Energy Weapons [DEW] program element.

TECHNOLOGY OPTIONS

General **ABRAHAMSON**. As to the last part, there are certain technologies that have a higher prospect of an early maturity, and certain others that may well be worthwhile pursuing because eventually they could offer a much higher level of performance. Let me just give you some example of those options.

The chemical laser, for example, in the near term may well have some important contributions that it can make. Another near term option is the neutral particle beam, which is being worked on in the Department of Energy, but there are some real questions about how fast that it can come forward that must be answered by certain investments over the next 2 years. Those are really important questions to answer. So the time to begin to make some of those choices will be either next year or the year after that.

I believe that the best answer to your question is that we will have to make some hard choices, and that will be, certainly, my responsibility so that we do not use money inefficiently on things that may not have a good prospect. However, at this point in time, for the first year's program, and under the plan that we have now laid out for the second year, we think that we have made the initial judgment. It will be my responsibility in these next 2 years to try to make some of the hard choices that you are suggesting. I understand the point.

DEFENSIVE/OFFENSIVE-ORIENTED WEAPONRY

Senator **Stevens**. Are those choices oriented primarily at defensive-type weapons that would be designed to have space defense against offensive weapons from a potential enemy?

General **Abrahamson**. Yes, sir.

Senator **Stevens**. We are not concentrating on developing offensive weapons in your program?

General **Abrahamson**. No, sir. My program is only defensive. Our whole target is other weapons, and not people, and certainly not any other military target except the nuclear ballistic missile as it is coming at us. Some of those technologies, as they develop, may indeed have a broader application, but we are focusing on the defensive programs.

Senator **Stevens**. Senator Stennis.

Senator **Stennis**. Well, Mr. Chairman, I am here today trying to play a little catchup football, I suppose. I was on the subcommittee that dealt with the space program, and the Moon shot program that followed. It is highly important, and $12 billion is important, too, as an item in the budget. I am here to learn. I have two or three questions that I will submit for the record, Mr. Chairman, to save time, if you want to move on to someone else.

Senator **Stevens**. Thank you.

Senator Kasten.

Senator **Kasten**. Thank you, Mr. Chairman.

GOALS OF STRATEGIC DEFENSE INITIATIVE

General, there continues to be a great deal of confusion about the overall goal of the strategic defense initiative. I would like, if I could, to just back up a little bit and look at basically what do we expect to gain. On the one hand, in the words of the President, he says that we could eliminate the threat posed by strategic nuclear missiles.

He went through a speech that said:

> What if free people could live secure in the knowledge that their security did not rest upon the threat of instant retaliation to deter a Soviet attack. If we could intercept and destroy strategic ballistic missiles before they reached our own soil and that of our allies.

This whole idea that somehow we could eliminate all of the threat. On the other side, there are those that are saying, essentially, what we are doing here is we are developing the strategic defense initiative to enhance deterrence.

We are recognizing that a perfect system is very difficult, if not impossible to achieve. There was an article in the Baltimore Sun today, by former Secretary Harold Brown, saying: "If a singular nuclear weapon can destroy a city of hundreds of thousands, only a perfect defense system, which moreover works perfectly every time, will suffice."

It seems to me that on the one hand we are arguing that we are in the process of developing a perfect system which will eliminate the threat. On the other hand, if I read your testimony and listen briefly to what you said, you think that what we are doing is increasing deterrence.

I wonder if you could discuss with us, because it seems to me that the idea that we are eliminating the threat is being used by your opponents saying, we can't eliminate the threat, therefore, we shouldn't do anything. On the other hand, there is an awful lot of "eliminate the threat" language floating around, including the President in his own speech.

I would like you, if you could, to describe, No. 1, the possibility of eliminating the threat—is that what you are tying to do, to create this ideal, perfect world—or are you talking about a system of enhancing deterrence aiming toward lessening of that possibly?

GOALS OF PRESIDENT

General **Abrahamson**. Yes, sir. It is an area where, of course, there is a lot of confusion. I think the important thing is what the President's speech laid out for us in our technical program, and beyond that, as a challenge to the people who will eventually be trying to translate that technical capability into a motivation to decrease arms and to find a way that we can reduce risk in the world. He set out a goal, therefore, I would like to start with what I consider the importance of goals.

It would be possible with some of the systems to embark now at a much lower capability kind of system and put that either in orbit or deployed on the ground, or wherever it may be necessary. With that lower expected level of defensive performance, it would improve the deterrence for a period of time. But eventually, given the fact that the system may not be as effective as one would like, then the reasonable Soviet response would be to say, "I believe I can overcome that. Therefore, let's try to overcome it."

Therefore, the importance of the goal is kind of what President Kennedy did. He didn't say: Let's go 90 percent of the way to the Moon, or 70 percent of the way to the Moon, He said: Let's go to the Moon. Let's get somebody safely there and bring him back.

By outlining a very challenging goal for us from a technical viewpoint, the President has, therefore, outlined a vector and that vector has to be one for our research program that would be very different than one that said: Let's move quickly, or let's try to get one that is 50 percent effective.

So the goal is terribly important, and the goal is for more than the technical program. It does offer, therefore, a program that will provide the technical muscle and the motivation so that arms control people will eventually some day be able to say: It is of little value to continue to invest in bigger and more effective offensive systems. When both sides are convinced of that, then they will be more inclined to say: Let's go ahead and reduce this level of offensive forces.

So the goal is different in the research program. It says where the research program should be directed. The research program has some important limits at this point. The first one is that it must be conducted within the limits of the ABM Treaty, and we are very conscious of that requirement. Therefore, we will not be conducting a prototype demonstration of any prohibited components. That would in fact be the point, and that is where the Ballistic Missile Treaty is well defined in this area.

If we tried to show that we could destroy an intercontinental ballistic missile with a laser from space or from the ground that would be something that would go beyond the treaty. Therefore, we will be working at the technology research level, something that the Russians are doing right now.

Our research program is to provide us with options that will eventually offer a future President and a future Congress decisions options so that they can then say: Yes, let's continue to try to build toward this very highly effective system.

I don't know what "highly effective" is. Some people will say, obviously, it is impossible to build a perfect system, and I recognize that nothing is perfect in the world. However, the way we have tried to describe it is to say, something that is thoroughly effective. We are dealing with deterrence because our real goal is to avoid ever using these systems, any system. What the level of effectiveness has to be to achieve that deterrence is a judgmental and a psychological type of thing.

As we bring forth the results of the technical program, then again future decisionmakers will look at that and they will make a judgment. They will say: What is the cost? What is the contribution to increasing our level of safety in the world? What is the potential effectiveness that we are dealing with? That tradeoff will be that future decision.

It is hard, and I am trying not to be evasive. I am trying to say that we have a very demanding goal which is structuring the way we will do the R&D programs, and future decisions will determine whether that will be 97 percent effective, or 95 percent effective, or a number like that.

DETERRENCE TO POSSIBLE U.S. ATTACKERS

Senator **Kasten**. Would it be fair for me to say that what you are trying to do is develop a system which increases the attacker's uncertainty, and that it need not be perfect, rather than developing a system that would eliminate the threat posed by strategic nuclear missile.

General **Abrahamson**. I don't think that it is that question. I think that the question is that the first objective, yes, sir, is to clearly increase deterrence through the contribution of defense as well as offense, so that the combination of the two of them will provide us options in the future so that a sane person, or even an insane person, would not be inclined to make an attack.

If that attack should ever happen, and of course that is just devastating, right now the only thing we have available, the only thing that a future President could do is to say: My choice, if I saw a set of incoming missiles, is to counterattack with offensive forces. We would like to offer that future President another option, one where he is allowed to go attack weapons with some true expectation that that will be an effective defense system.

I know that this is not a very satisfying answer.

Senator **Kasten**. I think that we understand each other. I think you understand the question I am trying to ask.

It just seems to me that the discussion of a perfect system, eliminating threat, eliminating war, safety, et cetera, is a discussion, frankly, that is counterproductive to the real goal that you have between now and a year from now.

If we continue to talk about the idea that if your program succeeds in whatever period of time, we are going to eliminate the threat of a nuclear war, and then your opponents come and say: But you can't do it. Therefore, you shouldn't be working on your program.

GOAL OF NUCLEAR DETERRENCE

It seems to me that we have got to talk not about eliminating the threat of nuclear war. The threat is still there. Somebody can sneak a nuclear device in with a suitcase. The threat of nuclear war is not going to go away because your program succeeds, it seems to me. It might be your goal, but it is way, way out there. Do you agree with me?

General **Abrahamson**. I do agree that the goal is a long ways out.

Frankly, it isn't the President, and it isn't those of us in the Department of Defense, or in the administration anywhere, who are dealing with the program, who have used the word "perfect." What we have tried to use is the words "a thoroughly reliable system," just to point out that it has got to be very, very good.

We are not trying to say that that means it is 97.7 percent effective. As an engineer, a system manager, myself and others would like to be able to say what this thing ought to be. People would like to say 99 percent, or 90 percent, or 76 percent. I don't know that number yet.

I think that it is really unreasonable to ask at this point in time. But, we do use the words "a thoroughly reliable system" to indicate that it has to be very, very good, which is something guite different from something that is only 50-percent reliable.

Senator **Kasten**. Thank you, Mr. Chairman. I know my time has expired.

Senator **Stevens**. We will do in 10 minute timeframes, and we will come back to you.

Senator Proxmire.

PHASES OF SDI PROGRAM

Senator **Proxmire**. General Abrahamson, in your testimony, you talk about this SDI program being divided into four phases.

General **Abrahamson**. Yes, sir.

Senator **Proxmire**. The research phase, the system development phase, the transition phase, and the final phase.

General **Abrahamson**. Yes, sir.

Senator **Proxmire**. As I understand it, during the transition phase you would have, and I quote, "incremental, sequential deployment defensive systems." During this time the Soviets will also be deploying their ballistic missile defense systems, and the United States and the Soviet Union will be negotiating arms control agreements to reduce both sides' nuclear forces.

Do you agree with Secretary DeLauer that if the Soviets increase their offensive forces, they could overwhelm our ballistic missile defenses. So the key to this is getting the Soviets to reduce while we build up our ballistic missile defenses?

General **Abrahamson**. I don't know exactly the context of your characterization of what Dr. DeLauer indicated. I think the important thing is this, there will be a transition period and it will be an important job to manage that in such a way that both sides will clearly reduce the risk.

There have to be good intentions on both sides, and the more effective the system is, the more the potential of that. The more convinced people are on both sides that that will happen, and it is possible, then the more effective you will be in trying to achieve some kind of arms reduction.

COOPERATION FROM SOVIET UNION

Senator **Proxmire**. The fundamental problem is that we cannot make this work unless the Soviet Union cooperates.

General **Abrahamson**. No. Let me put it exactly the other way. There is a misinterpretation here. I am glad that you did offer that, because I would like to correct what I think has been an impression from earlier testimony that I made.

The more effective a system like this is, and the promise of that effectiveness, the more likely arms negotiators will be in terms of trying to get an agreement of some particular kind.

The fact that a particular system exists doesn't achieve the final goal that we are after. The final goal is to say that we don't want the tremendous levels of nuclear missiles all over the world.

Senator **Proxmire**. All that the Soviets have to do to overcome it is to increase their ballistic missile options; isn't that right?

General **Abrahamson**. That is why I say that the key to this is to have a very effective defense and have both sides convinced that that is indeed possible.

Senator **Proxmire**. You disagree then with the argument, as I understand it, that Secretary DeLauer made that whatever defense system we build up, the other side can overcome it by increasing their ballistic missile options.

General **Abrahamson**. I am unwilling to accept the idea that you can always with an offensive improvement, overcome a defensive system. I think that technologies are now becoming available that people often quote as a given is not a law of nature.

Senator **Proxmire**. So you argue that it won't be necessary to get any cooperation at all out of the Soviet Union. We can do this unilaterally, and it will work to increase our deterrence?

General **Abrahamson**. I believe that if we were forced to implement such a thing, and again that is a decision that a future Congress and a future President might make, that, yes, indeed, the systems should be built, and the technical option should be available so that unilaterally they would offer that kind of increased protection.

However, that is not, I don't believe, what we are trying to do. I think the real objective is to have those technical options available so that they become a tool that we can use in arms control agreement to try to mutually find a way to reduce the risk in the world.

OFFENSIVE AND DEFENSIVE CAPABILITIES

Senator **Proxmire**. If the Soviet Union wishes to overcome this—I can recall vividly the 1972 debate before the Senate of the Anti-Ballistic Missile Treaty. The reason that we ratified that treaty, the reason that it became the law of the land, is because there was overwhelming agreement that an offense would overwhelm a defense.

By spending $1 on an offense, you can overcome $10 you spend on the defense with ballistic missile systems. You can choose the point of attack, you can choose the timing, and you can rely on any number of variety of offensive launching modes of missiles. You can choose your trajectory, et cetera. So the initiative would lie with the offense. The defense is the great dream, but it is going to be fantastically expensive, and almost surely ineffective.

General **Abrahamson**. I think that that was a true judgment, and it did reflect the state of technology back in that timeframe. But that is precisely why the group of scientists who looked at this and examined it very carefully, the Fletcher Commission, came to the oppostie conclusion, and said that certain of these technologies that are now emerging, if properly developed, do offer the chance to change that equation.

Senator **Proxmire**. You say that you want to do this in tandem with an arms control agreement. That would be the most effective way you could do it, with the Soviets and United States both reducing their offensive missile systems, and building their own defensive missiles, so that would be less vulnerable.

Would that require an enormous degree of refined verification of the kind that we don't seem to be anywhere near. It would require a degree of trusting the Soviet Union, of which there seems to be a minimum, certainly on the part of this Senator and most Senators, trusting the other side to cooperate?

General **Abrahamson**. I would like to answer that in two ways, sir.

First of all, I would like to introduce Mr. Frank Miller, and I have several witnesses who participated in both the policy studies and the technical studies, and they may wish to offer something here.

I would like to ask Frank to answer your questions, and then I would like to try to answer your questions as well, Senator.

Mr. MILLER. What General Abrahamson meant, Senator, was that we should continue to work in an SDI environment to reduce offensive arms as we are now doing in START. The verification requirements to continue to reduce offensive arms, especially nuclear ballistic missiles, woud be similar to the ones that we are currently trying to negotiate. As defensive technologies were proven, the political and military currency which ballistic missiles represent would be reduced, and that could lead to additional reductions in the future.

Senator PROXMIRE. Why wouldn't this involve a degree of sophistication and complexity and a reliability that would be considerably more difficult to achieve than if we just had a nuclear freeze?

Suppose that both sides agreed not to test, manufacture, or deploy nuclear weapons, why wouldn't it be simpler to enforce that, which many people feel is unrealistic, rather than this system which would require a step by step in tandem operation, in which neither would gain a sufficient edge so that they would be tempted to strike?

Mr. MILLER. I think there are a number of arguments in that regard. The first is that there are many arguments against a nuclear freeze and verification is but one of them. So there are a multitude of good reasons for not accepting a freeze.

That said, the verification requirements for deep reductions in ballistic missiles are within our grasp, and those are on the table or were on the table until the Soviets left the Geneva talks in START. If the Soviets cooperate, we can continue to get verifiable reductions agreements on ballistic missiles. That can happen.

At the same time, you are correct that we would have to construct a new arms control regime, which would, if both countries decided to go ahead with defensive systems, orchestrate the development and deployment of defensive systems. But this also would be verifiable because these are large systems whose development and deployment could be seen.

One of the problems with the freeze was that there are certain things, such as the manufacturer of nuclear warheads, which cannot be verified, but you could verify the deployment of large systems.

DISARMING OF BRITISH AND FRENCH NUCLEAR ARSENALS

Senator PROXMIRE. Let me ask one more question.

When we get to the transition phase that you talk about, when both the United States and the Soviet Union have deployed partial defensive systems, will this be the point at which the nuclear deterrence of our allies, the British and the French, would be effectively disarmed?

Wouldn't a partial missile defense for the Soviets be enough to nullify the much smaller French and British nuclear forces?

Mr. MILLER. The Soviets are already working on ballistic missile defenses, which presumably would be directed at British and French ballistic missile systems. What happoens to British and French deterrrence in the future?

Senator **Proxmire**. Sure they are working on it, but wouldn't this hasten it? Wouldn't the Soviets be inclined to step up their operation particularly in view of the fact that it would seem, at least in part, that the Anti-Missile Treaty that we agreed to in 1972 would have to be modified and not nullified.

Mr. **Miller**. I would make two points. To reiterate, the Soviets are already working on some of the advanced anti-ballistic missile defensive technologies that General Abrahamson has been talking about. This work could have a tremendously adverse effect on British and French deterrent systems.

Senator **Proxmire**. Let me interrupt just you to ask, if they put that into effect, wouldn't they be in violation of the ABM Treaty?

Mr. **Miller**. Yes, they would.

Senator **Proxmire**. They would have to renounce the ABM Treaty to do it?

Mr. **Miller**. That is correct, and those technologies would not be available for deployment until well into the 1990's at the earliest.

What Britain and France would do, to help maintain their nuclear deterrence in an era of defense agaisnt ballistic missiles, would be a question of some discussion between us and our allies. They could, for example, deploy air breathing systems with abilities to penetrate even advanced Soviet air defenses.

None of this is clear. What we are talking about at this point is a research program to see if these technologies on our own part would, in fact, hold the promise that the Fletcher Commission thinks that they might have. But there are a whole host of policy questions which will have to be examined, which we are examining as we proceed with the research program, before we even come up to the Congress at some future point, and to the alliance, to discuss full scale development and deployment.

Senator **Proxmire**. I know my time is up, Mr. Chairman, but I would like to ask, if possible, a question of General Abrahamson.

BUDGET INCREASES

The figures that you supplied us would show that the fiscal year 1984 appropriations in related areas overall, including the Department of Energy, was $1.017 billion, and you would increase that to almost $2 billion, an increase of about 21 percent.

Is there any other increase proposed for any program of over $1 billion that has nearly that large a percentage increase, or is this the biggest by far?

General **Abrahamson**. I think the way to look at it, sir, is to look at some of the emerging technologies. I don't know the specific answer.

Senator **Proxmire**. Could you get me an answer to that question, and if this is the biggest program there is of the programs over $1 billion.

General **Abrahamson**. I will have to supply that for the record. I don't know the answer from the top of my head, but the point I would like to make is that this is not a program like an F-16, which also was mine.

[The information follows:]

STRATEGIC DEFENSE INITIATIVE

The SDI is a research and technology demonstration program, not a system development one. There are no other reseach and technology demonstration program with a budget greater than $1 billion per year. Consequently there is not similar program greater than $1 billion with which to make a comparison.

The SDI is a collection of promising technology programs, a large number of which are moving from the paper design phase into the experimental hardware fabrication phase. All such programs show a rapid growth, such as we have requested for the SDI. The overall R&D budget is levelled by the falling funding of programs nearing completion and those terminated because of program failure. Programs such as these latter have not been included in the SDI.

The staff working paper, "Analysis of the Costs of the Administration's Strategic Defense Initiative," prepared by the Congressional Budget Office for the Subcommittee on Arms Control, Oceans, International Operations and Environment of the Senate Foreign Relations Committee, states in its summary that "such rapid growth is not atypical of newly started research and development [R&D] programs."

F-16 PROGRAM

General **ABRAHAMSON**. I assure, surely to double the volume production of the F-16, or even to double to development effort of the F-16 program early in its development process would have been an incredibly difficult thing to do, but this is development and production. This is looking at a series of technological options, and that is quite different in terms of research. Some of those are very, very valuable.

By the way, some of the efforts meet additional requirements over and above the defensive system. For example, in the surveillance area, in order for the defense to be effective, we have to have a much more effective surveillance and tracking, and kill assessment type of satellite system deployed. That system could also meet the needs, if it were not there, of what is now the defensive support program, which provides us ballistic missile warning. It would do those kinds of things.

What we have done in the Department of Defense, is to combine, for efficiency, the research for those follow-on programs. So we have included the requirements in this program where the primary objective of those programs serves the SDI.

Senator **PROXMIRE**. Thank you.

Senator **STENNIS**. Mr. Chairman, I ask unanimous consent that my three questions in preparation be submitted for the record for an answer.

Senator **STEVENS**. Yes, sir; we will be very pleased to do that.

DEFENSIVE WEAPONS PROGRAM

Gentleman, tell me, what we are talking about here this morning is totally a research and development program related to defense technology, is it not?

General **ABRAHAMSON**. That is correct, sir.

Senator **STEVENS**. Your previous answer indicated that at the present time, although there might be spin-offs later, your total program is oriented toward defensive weapons.

General **ABRAHAMSON**. Yes, sir; defensive weapons against nuclear ballistic missiles. The reason we are concentrated on the ballistic missile is because that is the most destabilizing and, we believe, the most dangerous and the most difficult to work against.

Senator **Stevens**. This is all nonnuclear.

General **Abrahamson**. The emphasis is nonnuclear. There are some proposals which are nuclear in nature, such as a nuclear pumped laser for space deployment, which I believe is worthwhile looking at, but our primary emphasis is nonnuclear.

Senator **Stevens**. You are talking about Dr. Teller's area?

General **Abrahamson**. Yes, sir.

Senator **Stevens**. But the program is designed to try and see if we can develop a series of systems that would reduce the effectiveness of an enemy's nuclear ballistic missiles?

General **Abrahamson**. Correct, sir.

Senator **Stevens**. We are pursuing at the same time the START talks if the Russians will return to the table.

General **Abrahamson**. Correct.

Senator **Stevens**. For the life of me, I really don't understand how this has gotten to the point where it has become as controversial as my friend from Wisconsin indicates. I just can't envision a human being on this globe that would not like to find a way to reduce the effectiveness of the existing nuclear weapons in the world.

We have reason to believe, don't we, that the Russians are conducting research similar to what you are involved in?

General **Abrahamson**. Yes, sir; they have been for as long or longer than we have. All of the evidence indicates that they are putting a very large percentage of their resources into both areas, improving their existing ballistic missile defensive ring, and operating it, but also into the same kind of advanced technologies that we are looking at.

OPTIONS FOR FUTURE ACTION

Senator **Stevens**. What option would a future President of the United States have if the Russians, who already have deployed their MX, would serve notice on the world that they have the system that would be totally effective against any offensive retaliatory weapon coming to them?

What option would there be for any future President?

General **Abrahamson**. I think that he would have none that would be acceptable to the American people.

Senator **Stevens**. I agree.

For what it is worth, this Senator believes that what you are doing is designed to help get the Russians back to that table. If we reach an agreement, as the Senator seems to postulate is possible, to reduce weapons, there would be a freeze at the new level, wouldn't there?

The concept is, you reduce down to a level, and that would be a freeze; is that right?

General **Abrahamson**. I believe so.

Senator **Stevens**. Some people want to freeze them where they are, and do no research at all to counter what the Russians are doing now in this field. I think that would not only be very catastrophic, but I don't think that we would be fulfilling our commitment under the Constitution with regard to providing for the defense of this country, and whoever participated in that decision would have to bear for the rest of his life, however long it might be.

I personally intend to support this program to the Nth degree.

Senator **Proxmire**. Would the gentleman yield?

Senator **Stevens**. Yes.

Senator **Proxmire**. Mr. Chairman, I do think that we have to consider the fact that we are being asked to increase the program by over 70 percent. We are being asked to make equipment to take us down a path for $25 billion over the next 5 years. I think we have every reason and every requirement that we look at this program to see whether or not it will work, or if they are not worthwhile.

I think to make any implication that those who want to ask questions about the programs, challenge the program, or are opposed to the program at the present moment, or are not convinced by the program, are indifferent to saving of life in nuclear war, I think that is very unfair and unwise. I can't believe that a man as thoughtful and sensitive as the chairman of this committee would provide that implication.

Senator **Stevens**. I would only say this, you have drawn that conclusion.

I remember so well when my good friend from Mississippi asked me to fly back all night from Dallas to cast a vote on the ABM program, which passed the Senate by one vote. We were going to build a system in order to get the Russians to the table to negotiate on that kind of a system. We passed that by one vote, and the Russians did come and negotiate. We did get an agreement, and we have not spent billions of dollars on building those systems.

It was the only thing they understood, and the Senator from Mississippi was absolutely right. As a matter of fact, I have told him often I would fly through the night for him anytime, because he can count. He knew he needed me.

Senator **Proxmire**. That is an astonishing statement by the chairman. The chairman is saying that we were absolutely right to stop the ABM operation in 1970, and we were. I say that it was a good decision then, and it is a good decision now.

Senator **Stevens**. You voted against it, don't forget that.

Senator **Proxmire**. I voted against what?

Senator **Stevens**. That ABM.

Senator **Proxmire**. I voted for the ABM Treaty.

Senator **Stevens**. The treaty is one thing, I am talking about authorizing the ABM.

Senator **Proxmire**. I surely did vote against that, and I am glad I did. That was one of the smartest votes I have cast.

Senator **Stevens**. There is no need to argue. You want to take credit for the result, but you tried to prevent the mechanism that brought about the results. This will bring about similar results if we have the resolve to do it.

Senator Stennis.

Senator **Stennis**. I have nothing further. I have enjoyed this meeting, and I have found it very helpful. [Laughter.]

Senator **Stevens**. Thank you, gentlemen.

Dr. **Cooper**. Thank you, Mr. Chairman.

SUBMITTED QUESTIONS

Senator **Stevens**. The committee has additional questions which will be submitted for your response. They will be inserted in the record at this point.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

ADDITIONAL COMMITTEE QUESTIONS

SPACE BUDGET

QUESTION: You are estimating overall DoD spending for space programs in FY 1985 to be $12.9 billion -- an increase of $2.3 billion.

In a period of restraint on defense budget growth, why is it necessary to increase the space budget so rapidly?

ANSWER: The increase in the space budget from FY 84 to FY 85 reflects decisions approved in prior years. A number of programs initiated in the early 1980's are reaching the mature stage where larger expenditures are required to support engineering development and advanced procurement.

When compared to previous space budgets the percentage of the space portion of the overall DoD TOA actually shows a 1 percent increase (from 3% to 4%).

FUTURE SPACE BUDGETS

QUESTION: With this kind of spending pattern, what percent of your future budgets do you plan to devote to space activities?

Won't other parts of the DoD budget have to be reduced to accommodate these activities?

ANSWER: The DoD space budget has remained relatively stable when considered as a percentage of the overall DoD budget (approximately 3%). In the future we estimate this percentage may increase to approximately 4.5%. The increases are required because the DoD is becoming increasingly dependent on space-based assets to conduct effective and efficient military operations.

SHUTTLE COST GROWTH

QUESTION: Space Shuttle O&M support cost are increasing nearly $200 million over the current rate -- and since FY 83 these support costs have grown from $169 million to the FY 85 budgeted level of $521 million. Most of the cost is related to the Vandenberg Air Force Base shuttle program.

Since the first shuttle launch at Vandenberg is not scheduled unitl FY 86, why is your Space Shuttle budget growing at such a rapid rate?

ANSWER: The primary reason for the increase in the O&M request is to support increasing participation by the DoD for missions on the Shuttle. The Vandenberg launch team (Shuttle

Processing Contractor) is just starting to man-up and these start-up costs account for a major portion of the increase. In addition, even through the first launch is not scheduled until FY 86, orbits 101 (non-flight) begins processing in November 1984. Orbits 103 (first-flight) begins processing in the spring of 1985. These processing dates are needed to support a 15 Oct 1985 launch. Finally, there is also a significant increase in the cost to fly on the Shuttle ($16.0M to $29.8M in FY 75$).

SHUTTLE LAUNCH SCHEDULE

QUESTION: As part of the financing agreement for the Space Shuttle, the Air Force pays NASA for shuttle orbiter flight charges two years in advance of the scheduled launches. The FY 85 budget request of $241 million will be paid to NASA for planned FY 87 launches.

Will NASA's recent revisions to the launch schedule affect the number of DOD launches for FY 87?

ANSWER: The FY 85 budget request for orbiter charges is for flights in FY 86 not FY 87. NASA'a recent revisions to the launch schedule will have no effect on the number of DoD launches for FY 86 or FY 87. As part of the NASA/DoD agreement, DoD has the right to "bump" non-DoD flights to ensure defense requirements are met, if a problem should develop.

SHUTTLE REIMBURSEMENT COSTS

QUESTION: In FY 83 the Air Force reimbursed $83 million to NASA for space shuttle costs. By FY 1988 these reimbursements are projected to increase to over $1 billion -- and this is additive to direct Air Force budgeted costs.

How did these reimbursement costs become so expensive?

Is there any way to control these outyear expenses?

ANSWER: There are several reasons for the large cost increase. First, the cost per launch has increased from $16.0 million to $29.8 million(FY 75$). Secondly, and more significantly, there is a large increase in the number of Shuttle missions per year. These increases, however, represent missions that would have been performed with expendable launchers. Since the Shuttle is more cost effective than expendable launchers, the net costs to DoD are actually reduced.

To help place a bound on out-year costs, we have an agreement with NASA to freeze per mission reimbursable costs for Shuttle missions through

1988. We are also working with NASA to identify the DoD flight charges for the post 1988 time frame. Preliminary discussions are underway toward extending the current memorandum of understanding calling for a DoD Shuttle flight charge of $29.8M (FY 75$).

ELV COST ESTIMATE

QUESTION: Despite the burgeoning Air Force shuttle costs, the Department has just proposed an expensive new program to develop, produce and launch 10 expendable rocket boosters.

Does anyone have any kind of reasonable estimate of what this new program will cost?

ANSWER: Our initial and very preliminary cost estimates are in the range of $160 to 425M for non-recurring and $170-207M for recurring costs. The variance in costs is large because of the range of potential ELV candidate solutions. After formal cost proposals are evaluated, we will be able to support more accurate estimates.

ELV COSTS AND OMB

QUESTION: Has this expensive proposal been cleared through OMB?

ANSWER: The Expendable Launch Vehicle (ELV) plan is now in OMB for their review and comments. We are working with OMB to identify and resolve any concerns they may have with the plan.

ELV BUDGET INITIATIVE

QUESTION: Shouldn't a major budget of this kind be developed as a budget amendment rather than a letter to the committees?

ANSWER: The letter was merely a way to inform the committees that the DoD planned to initiate an effort in FY 85 to acquire an unmanned launch vehicle to complement the shuttle. In any event the DoD would require Congressional approval to award a contract and incur termination liability should the DoD choose not to purchase the 10 vehicles. Our intent was to propose language for the FY 85 Defense Authorization Bill,as well as provide additional clarification and stipulations to be included in the report language.

ELV/SHUTTLE REDUNDANCY

QUESTION: The shuttle was supposed to be the cost effective alternative to expendable launch vehicles. Yet the Air Force is budgeting $95 million in 1985 for existing Titan launchers and now wants to embark on the new program to develop and acquire 10 more expendable launchers.

Is it either necessary or even affordable to maintain two redundant launch systems?

ANSWER: DoD studies and other independent evaluation have concluded that reliance on four orbiters for safe access to space for all national security space systems does not represent an assured, flexible and responsive access to space. A complementary system is necessary to provide high confidence access to space particularly since the Shuttle will be the only launch vehicle for all U.S. space users.

The costs to acquire this complementary system will be offset by reductions in Shuttle costs for 2 flights per year. There will be a an increased cost to DOD that reflects the difference in DoD Shuttle charges verses actual Shuttle costs to the nation, but we believe that the benefits to national security needs outweigh this additional cost.

SHUTTLE/ELV LAUNCH VOLUME

QUESTION: Is the satellite launch volume over the next several years sufficient to sustain both systems?

ANSWER: There is sufficient volume through FY 92 to sustain both systems. In addition, the DoD believes that those flights removed from the Shuttle to fly on ELVs could be resold to commercial users, thereby maintaining the full Shuttle mission model of 24 flights per year during the period FY 88-92.

ELV TERMINATION LIABILITY

QUESTION: We will include Deputy Secretary Taft's April 6 letter concerning the new ELV program in the record at this point.

What is the total termination liability if Congress authorizes this contract?

ANSWER: Our best estimate of the termination liability amount if Congress authorizes the contract is $94.0 million in FY 85 and $300.0 million in FY 86.

ELV CONTRACT

QUESTION: Please explain this contract proposal. Is it a services contract or a procurement contract?

ANSWER: The contract proposal is to fund the RDT&E costs for the vehicles, and the launch facility costs. The RDT&E costs will be amortized over the first ten vehicles. The DoD will commit to buy at least 2 ELVs/year for five years beginning in FY 88.

SHUTTLE COST OFFSETS

QUESTION: Please explain the statement, "We plan to use already programmed shuttle flight charges in FY 88-92 to partially offset the ELV purchase price."

ANSWER: It means that funds already identified as Shuttle flight charges will be shifted from the shuttle program line to the space boosters line. We program $58M (FY 83$) for each shuttle flight beyond FY 84. This $58M will not entirely offset the ELV purchase, however we are scheduled to re-look at the current pricing policy between DoD and NASA for the period beyond FY 88. Based on the pricing structure agreed to, the range of the offset could be from $75-125M per launch.

ELV CONTRACT APPROACH

QUESTION: Aside from pushing expenditures into the out-years, what is the advantage of this type of contract approach? Why doesn't the Air Force follow the usual procurement practices if these ELVs are needed?

ANSWER: The primary advantage of the proposed contract is that the large expenditure of DoD R&D funds early in the program is offset through contractor investment. All contractor R&D costs could then be amortized across the 10 vehicle buy. DoD would not commit any funds until one year prior to launch. Additionally the only government commitment required under this approach would be an obligation to reimburse contractors for non-recovered investment costs should the government terminate its proposed purchase of ELVs prior to FY 92

ELV CONTRACT DETAILS

QUESTION: Please submit full details of the proposed contractual arrangements, including yearly costs to the government, the impact on pertinent appropriation accounts, hardware and services provided, and the like.

ANSWER: The yearly costs for the contract have not been firmed up. Estimates used for study purposes identified costs of approximately $200M per vehicle. Based on that estimate, yearly costs in the FY87-92 timeframe would be $400M, with the total cost approximately $2.0B. However, these costs would be partially offset by Shuttle flight charges already included in the budget

As for the services and hardware to be provided, the contract will include the development, construction modifications (existing Titan launch complex), procurement, and launch services for the ten ELVs over the period 1985-1992.

TITAN COST INCREASES

QUESTION: Meanwhile, the Air Force is budgeting $95 million for operation and maintenance costs of existing Titan launchers.

Why is this cost increasing by about $25 million in one year?

ANSWER: The FY 85 O&M request of $94.7M is $14.1M over and above the amount approved in FY 84. While a portion of the increase is inflation for level of effort tasks, the remainder of the increase is caused by:

1) The need to fund for Transtage Upper Stage launch support which, until FY 84, was included in production contracts.

2) Incorporating launch incentives on Titan contracts.

The Air Force strongly believes a vigorous incentive plan is necessary to encourage contractors not to lose their critical workforce as we fly out the last of our Titan boosters. The incentive plan also carries substantial negative incentives in the event of a launch failure.

ELV AND TITAN

QUESTION: Why did the Air Force insist on closing the Titan production line last year if more expendable launchers are so essential?

ANSWER: There were two reasons: first, the policy established in prior years was to close the Titan production line after demonstration of the initial operational capability (IOC) for the Space Shuttle. This occured with STS-6 in April, 1983. Second, and more important, the Titan vehicles as currently designed do not meet the performance requirements for the range of DoD satellites envisioned for the ELV program.

TITAN LAUNCHES

QUESTION: How many Titan launches are planned for fisal year 1985?

ANSWER: There are currently five Titan launches planned for FY85, two from the Eastern Test Range at Cape Canaveral, FL., and three from the Western Test Range at Vandenberg AFB, CA.

TITANS AS ELVs

QUESTION: We will be pulling 50 or more Titans out of their silos when we modernize the ICBM force.

Why can't these missiles be employed as expendable launchers to handle any urgent requirements if the shuttle system isn't adequate?

ANSWER: The basic problem is that the Titan II's could only handle a portion of the required capability because of payload weight limitations. Nevertheless, the Air Force is now evaluating the feasibility of this proposal for at least a portion of the ELV requirements.

ELV AND TITAN PHASEDOWN

QUESTION: In light of the new ELV program, do we need to provide $4.9 million to complete the phasedown of the existing Titan III line?

ANSWER: Until the completion of the proposal evaluations it would be premature to speculate that the $4.9M to complete Titan III phasedown is not needed.

If Titan wins the competition then phasedown costs would be deferred until completion of the proposed program in FY 92.

STRATEGIC DEFENSE INITIATIVE

QUESTION: Many experts insist the outer space defense system envisioned under SDI is too difficult and probably too expensive to achieve. What is the Department's response?

ANSWER: The SDI seeks to create the technologies for a defense-in-depth which could engage a ballistic missile repeatedly in its flight, including boost-phase intercept and midcourse discrimination of decoys. The technology is not available to support such development today. The Defensive Technology Study Team concluded that "powerful new technologies are becoming available that justify a major technology development effort to provide future technical options to implement a defensive strategy." We believe that this optimism is well-founded in light of revolutionary improvements in data processing, space transportation, surveillance, ABM weapons and other promising technologies that have occurred in the past two decades and are expected to continue. The SDI seeks to answer questions concerning feasibility, affordability, and cost-effectiveness through a program of research and technology demonstration that will explore various strategic defense options and strategies.

QUESTION: Assuming a reasonable and effective long term R&D program, when do you think you will be able to narrow down the technologies and proceed with a deployable system?

ANSWER: In General Abrahamson's opening statement he gave an explanation of the development required by advancing a notional development cycle of four phases:

a. The Research Phase: The period of time from the President's March 23, 1983 speech to the early 1990s when a decision on whether to enter system development could be made by the President and Congress.

b. The System Development (or Full Scale Engineering Development) Phase: Assuming a decision to go ahead, the period of time beginning in the early 1990s when prototypes of actual defensive system components are designed, built, and tested.

c. The Transition Phase: The period of incremental, sequential deployment of defensive systems. It is our intention that each added increment, in conjunction with effective and survivable offensive systems, would increase deterrence, and reduce the risk of nuclear war. During this period, as the U.S. and Soviet Union deploy defenses against ballistic missiles that progressively reduce the value of such missiles, significant reductions in nuclear ballistic missiles would be negotiated and implemented.

d. Final Phase: The period of time during which deployments of highly effective multi-phased defensive systems are completed and during which ballistic missile force levels reach their negotiated nadir. This is the goal expressed in the President's 23 March 1983 speech. If similar technical progress in defense against other means of nuclear attack has been attained by this time, such defenses could also be incorporated. The most difficult, and therefore pacing, nuclear weapon to defend against is the ballistic missile; hence, defense against it is the specific objective of the programs collected under the SDI label.

QUESTION: Do you have any estimates that can be considered reliable on the overall cost of this space defense initiative?

ANSWER: It is impossible to judge the overall cost, since it is largely dependent upon decisions which will be made in the 1990s when promising concepts have been selected, system level development defined, and relevant strategies analyzed. The decisions will also rest, in part, on the future actions of the Soviet Union.

QUESTION: You are requesting $489 million for laser weapons research, up $166 million, or 51 percent. Can't that kind of spending increase be pared down without a major program redirection?

ANSWER: No. Major program redirection would occur forcing (1) a significant schedule slip, or (2) a narrowing of focus by overly limiting the concepts being explored while maintaining the same development pace. This request is for all of directed energy research in support of SDI, therefore, it includes not only laser concepts but also particle beam concepts. Further, laser candidates take several forms. Since the goal is to identify the feasible and most promising directed energy weapon (DEW) approach to boost phase intercept, narrowing the focus to concentrate on fewer concepts would incur greater risk in achieving a successful SDI outcome.

The DEW budget in FY84 totals $495 million with about $60 million for tactical applications and the remainder for strategic applications such as the SDI. Of the $435 million in strategic applications in FY84 $315 million is for SDI concepts, while the remainder generically supports SDI applications.

Nonnuclear Space Weapons

Question: The $356 million request for conventional, non-nuclear space weapons is an 80 percent increase over current spending. What are some of these kinetic energy weapons and how would they be employed in a strategic defense role? Is the kill mechanism non-nuclear?

Answer: The technology for two ground-based interceptors is to be developed. A high endoatmospheric, high performance interceptor will be flight tested [deleted] for use in the terminal defense phase. Also a ground-based exoatmospheric interceptor will be flight tested [deleted] for use during the mid-course defense phase. These two ground-based interceptors are to be the prime kill mechanism for the last two layers of a strategic defense system, and are nonnuclear.

Technologies for two space-based weapons will also be developed. The Kinetic Kill Vehicle program will develop technologies for a space-based chemically propelled interceptor which is capable of protecting space assets or attacking ballistic missiles during their boost phase. The space asset defense capability is to be demonstrated in the early to 1990s. Also, hypervelocity launcher program will develop these technologies for propelling miniature homing vehicles at great speed. The primary applications of these technologies under the SDI is for the interception of ballistic missiles during their boost phase.

STRATEGIC DEFENSE INITIATIVE

General Abrahamson, you have been selected as the so-called space czar for the Defense Department.

QUESTION: What kind of program structure will you head up? Are we talking about a DoD space agency?

ANSWER: We are not talking about a DoD Space Agency. We are talking about a research agency charged with the demonstration of technology to support options for system development of defenses against ballistic missiles.

QUESTION: Why do we need separate Air Force and Navy space commands now that we have a DoD space czar?

ANSWER: Air Force and Navy Space Commands would have operations as their primary function, whereas the Strategic Defense Initiative Office is involved in research. We do not normally put both operations and research in the same command.

Furthermore, the question makes an incorrect inference. The Director of the Strategic Defense Initiative Organization is not responsible for all space research, nor is the Strategic Defense Initiative program limited only to space-based defenses against ballistic missiles. The Director, Strategic Defense

Initiative Organization is responsible for research and technology relevant to defense against ballistic missiles; those defenses may be either space or earth based.

QUESTION: The entire $1.8 billion requested for space defense initatives, we understand, will be administered by DoD and allocated to the Service. What is the advantage of centralizing the Services' individual space weapons budgets?

ANSWER: The Strategic Defense Initiative does not centralize the Services' individual space weapons budgets; rather, it centralizes the portions of the research and technology budgets of the Military Departments and Defense Agencies which are directly related to defense against ballistic missiles. Space technology which is not relevant to such defenses is excluded; conversely, ground-based interceptor missile technology which is relevant is included.

There are several advantages to centralizing the management of DoD research for defense against ballistic missiles: (1) it avoids unintentional duplication of effort thereby assuring more effective use of funds; (2) it permits focused emphasis on the most challenging issues; (3) these budgets will no longer have to compete with other Service requirements, adding stability to funding levels; (4) a consolidated budget picture of the SDI's total investment is possible; (5) it facilitates the SDI Director's ability to allocate resources to individual projects; (6) it provides additional flexibility in maintenance of management reserves and reallocation of resources amongst the projects within a program element; and (7) it facilitates reprograming between program elements.

Question: Should there be a unified space command providing military direction and coordination for the Services and the other agencies involved in space?

Answer: This issue is presently under study. The Joint Chiefs of Staff have created a Joint Planning Staff for Space to formulate recommendations for the Secretary of Defense.

Arms Control in Space

QUESTION: The President's March 31 report to Congress on anti-satellite weapons concluded that "no arrangements or agreement beyond those already governing military activities in outer space have been found to date that are judged to be in the overall interest of the United States and its Alles." What are some of the problems facing arms control of weapons in space?

ANSWER: The significant problems affecting arms control are in the areas of verification, potential for a "breakout" from any agreement, compromise of sensitive information needed for verification, definition of space weapon systems, vulnerability of satellite support systems, and the Soviet non-weapon military space threat. Each of these items is discussed in detail in the President's 31 March 1984 report to Congress on U.S. Policy on ASAT Arms Control, pages 3-7.

ASAT Fund Obligation

QUESTION: Last year Congress prohibited the obligation or expenditure of $19.4 million in ASAT advance procurement funds until the issuance of this report. When do you intend to obligate these funds? How did this restriction impact the overall program?

ANSWER: Congress prohibited the obligation or expenditure of ASAT advance procurement funds until 45 days after issuance of the report on ASAT arms control. The funds were to have been obligated by 1 June 1984. However, given the recent actions in the House restricting testing, we plan to defer obligation until we obtain a clearer understanding of Congressional intent.

So far, Congressional restrictions have caused a slip in the planned date for initial operational capability (IOC) of six months. In addition, the overall cost of the program has increased because it will be necessary to requalify subcontractors and vendors who have completed their deliveries for the development program and who have been unable to begin work on production parts and subassemblies.

Tsongas Amendment Relief

QUESTION: Last year the Authorization bill prohibited testing the ASAT missile against targets in space until the President certified to Congress that the U.S. was endeavoring in good faith to negotiate a mutual and verifiable ban on ASAT weapons with the Soviet Union. Do you want relief from this legislative restriction? How would continuation of this restriction affect the ASAT program?

ANSWER: Relief from this legislation is desirable to enable unambigious continuation of the test portion of the ASAT program against objects in space. Without testing against objects in space, there is no assurance the miniature vehicle can effect the necessary maneuvers to intercept a satellite. Unless the President can comply with the required certification of the amendment, testing of the ASAT would be curtailed after the second space test this summer and before the first test against the instrumented test vehicle scheduled for later this year.

ASAT Readiness

QUESTION: Your ASAT procurement program request $83 million for procurement of ASAT missiles (number is classified) and $18.1 million for procurement of two ASAT weapons pylons and pallets. Is ASAT ready for production without any testing against targets in space?

ANSWER: The Air Force does not intend to begin low rate initial production of the ASAT missiles or carrier aircraft equipment (weapons pylon and pallet) prior to testing against targets in space. The Air Force needs relief from the language of the Tsongas amendment to test against targets in space.

Impact of ASAT Fund Cut

QUESTION: What would be the impact of a $60 million cut to ASAT missile procurement?

ANSWER: If $60 million were cut from the ASAT missile procurement request for FY85, the Air Force could not purchase any missiles.

Cut in ASAT Procurement Funds

QUESTION: $17M million in advance procurement funding is requested for lower stages of the missile programmed for production in 1986 for $8.9 million. The 67 percent advance procurement rate is unusually high. Why is that and what would be the impact of reducing that in half?

ANSWER: The $17.8 million in advance procurement funding (FY85) is requested to support production of the total missile procurement in FY86, not just the lower stage. The following data is taken from P-1 line Item 41/42 backup documentation (P-34):

	FY85 TOTAL	FY86 TOTAL
RECURRING FLYAWAY	39.1	78.8
- Miniature Vehicle & Dispenser	14.1	28.3
- Upper Stage	7.8	15.8
- Lower Stage	4.4	8.9
- Int. and Assembly	5.3	10.6
- Eng. Change Orders	7.5	15.2
OTHER WEAPON SYSTEM COST	39.2	24.3
- Data	1.3	2.4
- Support Equipment	1.6	3.1
- Training	4.1	4.4
- Non-Recurring	32.2	14.4
SPARES	6.2	12.3
TOTAL WEAPON SYSTEM COST	84.5	115.4
ADVANCE BUY	17.8	31.3
ADVANCE BUY CREDIT	(19.3)	(17.8)
TOTAL PROCUREMENT COST	83.0	128.9
[Deleted]	[deleted]	[deleted]

ASAT COSTS

QUESTION: You are seeking $32.2 million for nonrecurring costs in 1985. What specifically is required, its costs and what production rates will this capability yield?

ANSWER: The $32.2 million for nonrecurring costs in 1985 supports production readiness activities. Included are the following items:

- Producibility Upgrades (to flight control electronics, interface, and control unit, etc)	$10.5M
- Production Specification Upgrades	$ 4.0M
- Integrated Logistic Support Items	$12.2M
- Tooling Design and Development	$ 2.0M
- Systems Integration	$ 3.5M

This delineation is the program office current best estimate of the tasks and funding required. This may change when contractor proposals are received. The maximum production rate associated with the $32.2 million nonrecurring cost is 24 missiles/year (two/month).

ASAT Engineering Change Order

QUESTION: The Department has budgeted about 20 percent for Engineering Change Orders -- a very high rate perhaps reflecting the high risk nature of the program. Would another year of devlepment reduce the risks to a more tolerable level?

ANSWER: An additional year of testing could reduce the risk in the program. However, if the production is not begun in FY85, there are funding and schedule impacts. Subcontractors and vendors supplying critical piece parts or subassemblies will have to be requalified as nearly all will have completed deliveries for the develoment program by the end of FY84. In some instances, they may be lost entirely and new subcontractors and vendors will have to be found and qualified.

There is a small amont of concurrency between the development and production phases of the ASAT. This is caused by a desire to field an operational system against an existing threat, as soon as prudently possible. To date, the results of the ground and flight tests indicate the technological and engineering approach will work as envisioned. A critical, future milestone is the test against an object in space. If successful, this test will greatly increase our confidence in the system to meet its operational requirements. It is scheduled to occur before the low rate initial production decision to buy 2 missiles.

HEAVY LIFT ELV

QUESTION: We understand the SDI program may require a heavy lift launch vehicle.

Are there plans for such a heavy lift ELV? If so, what is the estimated development and production cost?

ANSWER: There is no requirement established for a heavy lift vehicle at this time. However, we are investigating the need for such a vehicle in view of potential SDI applications and other DoD programs. We are not far enough along in our evaluations to develop cost estimates.

MX FOR HEAVY LIFT

QUESTION: The Scowcroft Commisssion recommended using the MX as a space booster for SDI.

What's wrong with using the MX or a modification of it for heavy lift launching?

ANSWER: MX payload capabilities preclude its consideration as a heavy lift launch vehicle. The MX capability to low earth orbit is 4,500 pounds, and to geosynchronous only 500 pounds.

SPACE PLANE

QUESTION: There is a relatively small $2.8 million request to initiate development of a trans-atmospheric vehicle, the so-called space plane.

What is the Air Force requirement for this vehicle? What are its proposed missions?

ANSWER: The requirement for space plane technology is now under evaluation, however, some of the missions envisioned include astronaut ferry and rescue, reconnaissance, satellite inspection, space station resupply and payload launch.

SPACE PLANE COSTS

QUESTION: The space plane could be an extremely costly project within a few years.

Do you have any total program cost estimate? Any estimate of what it would cost to take the space plane to full scale development?

ANSWER: Until a technology program can be conducted to begin working the required high risk technology, including manufacturing technology, it is not possible to identify full scale development or total program costs at this time. To proceed into development, however, will require a full evaluation of both cost and mission effectiveness.

SPACE PLANE TIMING

QUESTION: With all the other space initiatives, why is it necessary to get going now on a space plane project?

ANSWER: We believe the potential of a space plane is high enough to warrent exploring the technologies required to provide a production decision by 1990.The space plane would be uniquely tailored to military mission requirements, with the primary requirement being the capability to take off from an aircraft runway and accelerate directly to orbit instead of being built up on a fixed launch pad. This would provide increased flexibility and survivability for satisfying military space missions.

Additionally, it would provide for direct access to all orbital planes, independent of launch site, and would provide rapid turn-around capability (day vs weeks) and quick reaction time (hours vs weeks).

Defense Satellite Communications System (DSCS) III

QUESTION: The House Armed Services Committee recommends that the second phase of the DSCS III multi-year procurement, to be financed by the advance procurement request, be denied. It is not clear whether this recommendation will result in outlay reductions next year. The subcommittee is informed that further savings may accrue by using multi-year procurement.

What are the current estimates for savings using the multi-year procurement of the DSCS III system satellites?

ANSWER: The Air Force has already procured two RDT&E and five production DSCS III satellites. Seven more DSCS III satellites remain to be procured under a "follow-on" production program. The acquisition profile for the follow-on production is two satellites in FY 1985, two in FY 1986, two in FY 1986, and one in FY 1988. The Air Force received conditional approval for a multi-year procurement (MYP) start in FY 1984 which involved an economic order quantity (EOQ) advancement procurement of seven sets of long lead parts. The Air Force submitted the following estimates in the February 1984 Multi-Year Procurement Budget Justification Document that supported the President's FY 1985 Budget Request:

	$ Millions					
	FY 84	FY 85	FY 86	FY 87	FY 88	Total
Annual	97.1	215.1	281.4	235.6	132.7	961.9
MYP	115.7	291.2	149.5	144.1	85.6	786.1
Delta	-18.6	-76.1	+131.9	+91.5	+47.1	+175.8

These figures indicate that although the HASC may reduce the FY 1985 Defense funding $76.1 million by denying DSCS III MYP, they will cause a significant increase during the FY 1986-88 period.

Another perspective is outlays. Shown below are the projected outlays for the above funding profile:

	Outlays - $ Millions								
	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89	FY90	FY91	FY92
Annual	42.2	63.8	164.5	216.1	212.1	162.0	75.6	21.1	4.4
MYP	53.3	122.0	153.9	160.0	135.8	98.9	46.4	12.9	2.9
Delta	-11.1	-58.2	+10.6	+56.1	+76.3	+63.1	+29.2	+8.3	+1.5

A comparison can also be made by converting the outlays to constant year dollars (FY 1984) and discounting (at 10%) for present value. If this is done, the value of the annual contract is $508.5 million and the MYP is $443.8 million.

In accordance with the FY 1984 Appropriations Act, the Air Force has solicited cost proposals for both Annual Contracting and Multi-Year contracting and will submit updated budget exhibits, based on these proposals, to the Armed Services Committees and Defense Appropriations Subcommittees before contract award. The Air Force is working towards a schedule that would make them prepared to award a multi-year contract this October 1984.

QUESTION: DSCS III satellite communication capabilities satisfy users with wideband (high data rate) requirements.

What provisions are being made to ensure that in time of war any critical wideband needs are still satisfied even though some DSCS satellites or ground stations might be lost?

ANSWER: The two threats to a DSCS III satellite are jamming and nuclear attack; the key threat to the ground segment is a physical attack on the control stations. Each threat and corresponding DSCS III survivability will be separately addressed.

Jamming: DSCS III is the first operational communications satellite to have electronic steerable multiple beam antennae. **[Deleted.]** Further, a jam resistant, secure communications (JRSC) segment of the DSCS program is being deployed at selected sites. This segment will provide spread spectrum multiple access to critical users. **[Deleted.]**

In addition to trying to jam the communications relay function of the satellite, the enemy may also attempt to jam the telemetry, tracking and control functions. Again, the use of spread spectrum techniques at super high frequency provides enduring satellite control capability for the DSCS III system. The DSCS III system with JRSC is the most jam-resistant space communications system in existence and will provide communications capability vital to our national security for both the near- and mid-term.

Nuclear Threat: The most destructive aspects of a nuclear attack on a satellite are radiation **[deleted]** and electromagnetic pulse (EMP). **[Deleted.]** The capability of the DSCS III was verified by exposing a model DSCS III satellite to an underground nuclear explosion in June 1980. Furthermore, all critical flight satellite parts and components are subjected to survivability acceptance tests using X-radiation and EMP simulations.

In addition, a minimum of two spare DSCS satellites will be kept on orbit. If a DSCS III is destroyed, a spare DSCS could be moved in to provide continuing operations. **[Deleted.]**

Ground Stations: All military satellites are currently controlled by the Air Force Satellite Control Facility (SCF) at Sunnyvale, California. The Air Force is building a Consolidate Space Operations Center at Colorado Springs that will assume primary control responsibility with the SCF having backup control capability.

The DSCS satellites also have unique ground control elements that control the communciations payload on the satellite as well as providing terrestrial network control. Up to eight of these will be deployed around the world. **[Deleted.]** Finally, all JRSC communications stations are being hardened against EMP

CSOC IOC

QUESTION: In 1982, this Committee was told that the Consolidated Space Operations Center (CSOC) was critical for national security and that its schedule could not be allowed to slip. At that time DoD argued that:

-the Satellite Control Facility at Sunnyvale, California and the Johnson Space Center in Houston were vulnerable to natural and man-made disasters;

-the Johnson Space Center was unable to handle the number of Shuttle missions scheduled for the late 1980s;

-the Johnson Space Center lacked the security to handle the highly classified national security missions of the Shuttle in the mid-to-late 1980s.

Given these concerns with space operations management, why has DoD voluntarily slipped the IOC of the Shuttle operations and Planning Complex (SOPC) portion of CSOC by two years in the current budget revision.

ANSWER: These operational concerns remain valid and the Air Force intends to complete the SOPC to increase the operational dependability and responsiveness of the national Space Transportation System to satisfy mission requirements that are unique to DoD. The February 1984 submission of the President's Budget accordingly requested funds that would provide for activation of the SOPC by 1990.

In response to the President's budget reduction, DoD reduced the funding originally requested in the Fiscal Year 1985 President's Budget. Projects like the SOPC that are not yet under contract have more funding flexibility than do more mature projects for which the Government has already established contractual obligations and, in some cases, incurred termination liabilities.

CSOC SLIP IMPACT

QUESTION: What impact does this have on your overall space planning and operations management?

ANSWER: None of the presently scheduled DoD Shuttle missions will be cancelled or deferred as a result of the SOPC slip, alone. NASA's Johnson Space Center (JSC) is undertaking several upgrades to their Shuttle control facilities that can support the DoD flight rates for the additional two years.

The real impact of the SOPC slip is to extend DoD's current exposure to operational risks by two additional years. Specifically, continued reliance on JSC as a vulnerable control center without a backup capability presents a significant risk to DoD's need for assured and responsive access to space. Secondly, prolonged operation of sensitive DoD missions in the JSC environment increases the risk of exposing sensitive operational aspects of DoD missions.

JSC CAPABILITY

QUESTION: Has the capability of Johnson Space Center to handle most Shuttle missions planned for 1988-1990 decreased to a level Johnson can handle?

ANSWER: NASA is in the process of upgrading the capacity of the Johnson Space Center (JSC) to support increased Shuttle flight rates. Development of the Software Production Facility, for example, will allow faster preparation of the flight software for each mission. Improvements in the simulator and flight control systems have also been identified which will significantly decrease the time required for mission-to-mission reconfiguration of these systems.

The number of classified DoD Shuttle missions planned for 1988-1990 remains unchanged. During this period, the maximum DoD flight rate is 12 classified missions per year. NASA has assured DoD that JSC's Controlled Mode can handle DoD's near-term needs until activation of the DoD Shuttle Operation and Planning Complex in 1992.

CSOC COST IMPACT

QUESTION: What is the increased cost of delaying the SOPC portion of CSOC for two years?

ANSWER: The net increase is $69.4 million in "then year" dollars.

INVESTMENT DECISION

QUESTION: Does it make sense to invest tens of billions of dollars in the Shuttle and in various payloads --some of high national security order -- and then delay a back-up control facility for two years?

ANSWER: DoD's intent has been, and continues to be, to protect the investment in the Shuttle by establishing a second, more secure control facility at the Shuttle Operations and Planning Complex (SOPC). Accordingly, the February 1984 submission of the President's Budget requested funds that would provide for activation of the SOPC by 1990. Nevertheless, in response to the President's budget reduction, and on strict program priority basis, a two year deferral of SOPC activation was a reasonable means to reduce funding requirements in fiscal year 1985.

MILSTAR

QUESTION: The Joint, tri-Service MILSTAR satellite communication program plans a $931.8 million RDT&E investment over the year FY 1983 to FY 1986. A large classified number of dollars is planned for the out-years.

What is the total cost of the MILSTAR system? At what point in the program will the total RDT&E and procurement costs be made available?

ANSWER: The total Air Force development costs projected through FY 1989 as contained in the FY 1985 President's Budget (including FY 1982) are estimated to be approximately **[deleted]** million in then-year dollars. This figure includes RDT&E costs to complete MILSTAR Block I development, initiate Block II development, and to develop the mission control and (USAF-only) terminal segments. The total Air Force procurement costs currently projected from FY-1984 through FY 1989 (as contained in the FY 1985 President's Budget) are:

- **[Deleted.]**
- **[Deleted.]**
- **[Deleted.]**

Changes to these cost estimates will be briefed annually to Congress by the Air Force when the budget is submitted. This will provide Congress the most up to date cost estimate for the program.

Different Satellite Communications Systems

QUESTION: Many different satellite communication systems are in various stages of R&D or operational use. The Air Force AFSAT, the Navy FLTSAT, MILSTAR and DSCS III are examples. There seems to be overlap in the requirements for these systems.

What planning is being done to ensure that only essential tactical and strategic satellite communication services are being efficently phased in, while preserving interoperability among the services?

ANSWER: There are many communities of MILSATCOM users, each having their own distinct set of requirements. These sets of requirements have been under constant review by many different elements within the Government, e.g., DCA, Services, Defense and other national agencies. This review process has produced a general organization of the requirements into several categories characterized by the levels of required survivability. The top level consists of the most critical strategic and tactical users who require the highest level of survivability. Their MILSATCOM needs are presently being satisfied by the AFSATCOM and DSCS systems. In the future, some of these users will transition to MILSTAR, a system far more survivable than either AFSATCOM or DSCS. Because of the cost and capacity limitations of the MILSTAR system, the number of its users must be severely restricted.

After accommodating the maximum number of users of AFSATCOM/MILSTAR, the majority of users still remains. Most of this community still require some survivability, but they are necessarily constrained to resources with lower cost and, in some cases, higher capacity. The majority of these users are accommodated on the DSCS series (II, III).

There is still a set of users whose requirements cannot be fulfilled even on DSCS. Generally these users do not require a high degree of survivability, but do require that the ground terminals be very inexpensive, highly mobile/transportable and have world-wide connectivity. This class of users are typically accommodated on the GAPSAT/FLTSAT/LEASAT system.

The planning for the total MILSATCOM resources is a constant on-going process carried out by numerous DOD elements. A key contributor to this planning process is the MILSATCOM Systems Office in DCA. A primary responsibility of this office is to produce the

MILSATCOM architecture. A recent document, the MILSATCOM Architecture Framework, is presently being coordinated throughout the MILSATCOM and C3I communities. This document will provide these communities with the necessary guidance for their future planning activitiees, such as to promote optimum use of the present and future resources.

A major factor in the preparation of the architecture is the question of interoperability. Because of the diverse nature of the very large MILSATCOM user community, it is extremely difficult, if not impossible, to have universal interoperability. A more viable approach is to constrain the number of unique systems developed for the various user communities. The architecture process helps achieve this objective by aggregating the users into a number of user classes where the members or each user class share requirements having a reasonable degree of commonality. The satellite and ground assets are then developed to satisfy this minimal set of user classes. The present system closely approximates this approach. Future systems should achieve much higher levels of interoperability.

QUESTION: Provide an annotated copy of your original NAVSTAR GPS Multiyear justification request reflecting the actual negotiated contract prices.

ANSWER: An annotated copy of the original NAVSTAR GPS Multiyear justification with actual negotiated contract prices is attached.

MULTIYEAR CONTRACT FUNDING PLAN

NAVSTAR GLOBAL POSITIONING SYSTEM 1/

(TY $M)

	FY 1982 Qty/Amt	FY 1983 Qty Amt	FY 1984 Qty Amt	FY 1985 Qty/Amt	FY 1986 Qty Amt	FY 1987 Qty Amt	To Complete	Total Qty/Amt
Annual Proposal								
GPS	0/20.1	1/102.0	3/178.9	7/307.8	7/264.1	7/287.5	3/158.9	28/1319.3
IONDS	0.4	22.5	25.8	32.7	57.2	33.2	0	171.8
PAM D	0	37.8	37.3	33.5	13.1	7.2	0	128.9
Net Request	20.5	162.3	242.0	374.0	334.4	327.9	158.9	1620.0
Advance Funding - None								
Total Request	20.5	162.3	242.0	374.0	334.4	327.9	158.9	1620.0
Multi-Year Proposal								
GPS	0/20.1	0/102.0	1/243.4	6/306.9	9/207.6	8/155.8	4/125.8	28/1161.6
IONDS	0.4	22.5	23.4	24.8	22.8	16.9	12.2	123.0
PAM D	0	37.8	31.8	31.5	15.0	7.1	0	123.2
Net Request	20.5	162.3	298.6	363.2	245.4	179.8	138.0	1407.8
Advance Funding - None								
Total Request	20.5	162.3	298.6	363.2	245.4	179.8	138.0	1407.8
Proposed Saving Over Annual	0	0	-56.6	+10.8	+ 89.0	+148.1	+20.9	+212.2
Actual Negotiated Contract Prices								
GPS	0/19.0	0/107.4	1/253.4	6/309.2	9/184.3	8/124.2	4/63.8	28/1061.3
IONDS	0	30.9	32.7	22.4	23.5	16.0	10.9	136.4
PAM D	0	37.8	18.1	36.0	33.2	26.5	34.2	185.8
Net Price	19.0	176.1	304.2	367.6	241.0	166.7	108.9	1383.5
Advance Funding - None								
Actual Saving Over Annual	+1.5	-13.8	-62.2	+6.4	+93.4	+161.2	+50.0	+236.5
Outlays 2/	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88 to FY 96	TOTAL
Annual	1.5	23.5	109.1	198.0	292.8	323.3	671.8	1620.0
Multiyear	9.9	154.9	255.2	183.0	168.9	140.8	525.1	1407.8
Difference	+8.4	+131.4	+116.1	-15.0	-123.9	-182.5	-146.7	-212.2

1/ Includes GPS Satellites, IONDS, and PAM D.

2/ Outlays continue through FY 95 for full funding and FY 90 for block buy.

Exhibit No. 38U
Reflect data as of
25 May 1984

QUESTION: Explain what the $1.3 million for "launch support" provides when the cost of launching the GPS space craft from shuttle orbitor are funded in the space launch support program line,

ANSWER: The $1.3 million is for prelaunch preparation, orbital insertion and checkout, and major anomaly analysis of the GPS satellite and is performed by the GPS contractors. All other launch support is funded in the space launch support program line.

QUESTION: For the multiyear procurement of the GPS satellite and the PAM-D boosters, by quarter, show the required delivery rates and scheduled launches of these satellites.

ANSWER: elivery requirements for GPS satellites and PAM-D boosters, by quarter, are as follows: fourth quarter FY 1986 - 1; FY 1987 - 2, 1, 3, 2; FY 1988 - 2, 2, 2, 2; FY 1989 - 2, 2, 3, 3; and first quarter FY 1990 - 1. The GPS force structure is 18 satellites with three on-orbit spares for a total on-orbit requirement of 21. These first 21 scheduled launches, by quarter, are as follows: FY 1987 - 2, 1, 2, 3; FY 1988 - 2, 2, 2, 3; FY 1989 - 2, 2. The remaining seven GPS satellites/PAM-D boosters will be used in case of failure of any of the first 21 launches and to replace satellites as they fail.

SPACE LAUNCH SUPPORT

QUESTION: The Department is seeking $91.8 million in advanced procurement funding to resume production of the inertial upper stage (IUS) after an April, 1983 flight failure. What evidence is there supporting your decision to resume production, and will there be any testing before resumption of actual flights?

ANSWER: We are confident that the failure that caused the IUS second stage motor anomaly during the STS-6 mission is understood. The interface between the motor and the exit cone that enabled the nozzle to gimbal failed approximately 83 seconds into the 127 second burn. Design modifications to the nozzle are in work, and we have had two successful tests that confirmed the design characteristics for the new nozzle. The next test, scheduled for August, will be a qualification motor firing of the new nozzle to confirm the flight readiness of these motors.

PAM-D FAILURES

QUESTIONS: Earlier this year two shuttle launched space craft were lost due to commercial PAM-D failures. Will it be necessary to change the configuration of these 28 PAM-Ds currently under multiyear contract as a result of those failures, and if so what are the revised cost and schedule?

ANSWER: The 28 PAM-Ds currently under

multiyear contract are actually PAM-D II's. These are related to the PAM-Ds that have failed recently but in fact are a more powerful booster. The PAM-D II uses a different motor and a different nozzle than that on the PAM-D. These are the areas that are suspect on the PAM-Ds. Further, the first PAM-D II was successfully test fired this past April. We will continue to monitor the PAM-D anomaly investigation.

QUESTIONS SUBMITTED BY SENATOR KASTEN

Relationship of SDI to Arms Control

QUESTION: Can you comment on the relationship between SDI and arms control, both in terms of existing agreements like the ABM Treaty, and future offensive limitation agreements that might enhance a system of strategic defense.

ANSWER: The SDI is a research program that is designed to explore the potential of defensive technologies to support an effective defense against ballistic missiles. As a research program, the SDI will be consistent with all current U.S. treaty commitments. However, in the future, following completion of the research program, if it should prove possible to develop and deploy an effective defense against ballistic missiles and a decision were made to do so, such defenses could enhance the likelihood of substantial negotiated reductions in ballistic missile forces. Effective defenses would have this potential because of their ability to significantly reduce or eliminate the military value of ballistic missiles and thus reduce the desirability of maintaining large ballistic missile forces.

Just as arms control is important in today's offense-dominant world, it would be no less important in a potential future world in which defensive systems play a major role. Arms control could be useful in helping to define and regulate a transition to a balanced offensive and defensive force environment. It also could be useful in proscribing the development or deployment of technologies or systems with potential for reducing the effectiveness of defensive systems.

STRATEGIC DEFENSE INITIATIVE

QUESTION: Supporters of the concept of strategic defense have remarked that there may be something of an unholy alliance at work to undermine the SDI. On the one hand, there is the arms control community which sees SDI as a threat to the concept of mutual assured destruction (MAD). On the other, is a segment of our own defense establishment, which sees SDI as a threat to offensive strategic systems. Would you care to comment on what you perceive to be the basis of opposition to SDI, both within and without?

ANSWER: As you point out, there are a number of views within the various communities that are at variance with the conclusions of the Fletcher Study and the views of the SDI. Nonetheless, all share the hope for the prevention of nuclear war. The most vocal opposition groups are those who believe the concept of eliminating the threat of ballistic missiles cannot be done. Of course, history is replete with examples of successes after experts said it couldn't be done. We strongly believe that recent advances in a variety of technologies make the potential for effective missile defense very good.

QUESTION: In your prepared testimony, you state that during the final phase of SDI there will be an integrated defensive system capable of countering all types of nuclear threats. How do you envision the integration of defenses against cruise missiles and low trajectory submarine launched ballistic missiles into SDI?

ANSWER: The SDI is now, and will be for the immediate future, focused on defending against ballistic missiles, including submarine launched ballistic missiles, regardless of flight trajectory. The SDI is primarily focused on eliminating the threat of ballistic missiles because: (1) they are the strategic offensive weapon with the greatest potential to support a disarming first strike and are, therefore, the most destabilizing; (2) ballistic missile defense is much more technically difficult than bomber or cruise missile defense. It makes no sense to solve the latter without first solving the technical difficulties associated with the former. However, a system for ballistic missile defense may indeed have some utility against bombers and cruise missiles also. It is clear that many of the technologies developed through investigation of ballistic missile defenses can be applied both directly and indirectly to air defense. The precise integration of these efforts can only come later as the specific technologies are selected.

QUESTION: One of the major criticisms of SDI is its projected cost. But even the highest projections for the cost of SDI represent only a fraction of the cost of offensive systems during the same period. If research concerning the SDI is promising, is it realistic to hope that resources will be shifted from offensive to defensive systems, providing us with enhanced security at a lower cost? Or is it more likely that SDI will not cause any revolution in strategic thinking, but merely be grafted onto the existing approach?

ANSWER: We believe it is realistic to hope that the resources required to maintain deterrence by means of a defensive strategy will represent an investment in a carefully constructed force mix of offensive and defensive weapons - not simply "grafting" the defensive weapons onto the existing strategy.

The SDI program is not a "new start" in the usual sense in that substantially all of the relevant technologies have been funded in previous years. To implement the Strategic Defense Initiative, we have focused these previously existing related research efforts into a single program. Preliminary assessments suggest that the eventual costs will not significantly change the strategic program share of the overall DoD budget, which is currently 14%.

QUESTION: Can you comment on the most promising technologies within the five technical areas of SDI?

ANSWER: Some examples of the more promising technologies identified by the Defensive Technologies (Fletcher) Study are: (1) directed energy technologies, such as visible and IR lasers and neutral particle beams; (2) precision sensors, including two-dimensional (mosaic) optics for search and tracking, laser imaging (LIDAR), and millimeter wave radar imaging and tracking; (3) electronics, such as processors capable of billions of operations per second and micro-miniaturized electronics, which when combined with precision sensors, make small precision-guided hit-to-kill intercepts possible; and (4) hypervelocity gun technology.

QUESTIONS SUBMITTED BY SENATOR STENNIS

STRATEGIC DEFENSE INITIATIVE

QUESTION: The objective of a research and development effort is to produce a deployable weapons system. Based upon what you know about Strategic Defense, when might we expect initial deployment of a weapons system?

ANSWER: As stated in General Abrahamson's opening statement, one can postulate four phases of a notional development cycle:

a. The Research Phase: The period of time from the President's March 23, 1983 speech to the early 1990s when a decision on whether to enter system development could be made by the President and Congress.

b. The System Development (or Full Scale Engineering Development) Phase: Assuming a decision to go ahead, the period of time beginning in the early 1990s when prototypes of actual defensive system components are designed, built, and tested.

c. The Transition Phase: The period of incremental, sequential deployment of defensive systems. It is our intention that each added increment, in conjunction with effective and survivable offensive systems, would increase deterrence, and reduce the risk of nuclear war. During this period, as the U.S. and Soviet Union deploy defenses against ballistic missiles that progressively reduce the value of such missiles, significant reductions in nuclear ballistic missiles would be negotiated and implemented.

d. Final Phase: The period of time during which deployments of highly effective multi-phased defensive systems are completed and during which ballistic missile force levels reach their negotiated nadir. This is the goal expressed in the President's 23 March 1983 speech. If similar technical progress in defense against other means of nuclear attack has been attained by this time, such defenses could also be incorporated. The most difficult, and therefore pacing, nuclear weapon to defend against is the ballistic missile; hence, defense against it is the specific objective of the programs collected under the SDI label.

The answer to the question posed can only become clear as we progress with SDI. The Fletcher Study concluded that, if a deployment decision were made, a full four-phase, multi-layer defense system could be in place after the year 2000.

QUESTION: What is your estimate of the total cost of deploying a defensive system based on the R&D you are proposing?

Some have said the cost will be "staggering"--even as much as a trillion dollars. Is that true?

ANSWER: As stated earlier, no reliable estimates of the eventual cost of a multi-layered defense against ballistic missiles are now available. An understanding of the likely costs will mature as the technologies and system architectures mature. Our objective is to be able to provide sound cost estimates in the early 1990s, when system development proposals could be made by the President and funded by the Congress. Our preliminary assessment suggests that these costs will not significantly change the strategic program share of the overall DoD budget which is currently 14%.

QUESTION: Would you say that strategic offensive weapons such as ICBMs and bombers would be less needed as a result of your defense system?

ANSWER: As strategic defensive technologies and systems evolve, there will undoubtedly be changes in our strategic outlook and our nations' offensive requirements. It is our hope that if we achieve a stable deterrent against coercion and war with less reliance upon offensive weapons and more reliance on strategic defense, we can create major new incentives to limit nuclear weapons.

QUESTION: Could we have fewer weapons in the future if your plan goes forward?

ANSWER: As stated in the previous question, it is our hope that an effective strategic defensive system would increase the incentives to limit the nuclear weapons needed to maintain a stable deterrent to nuclear war.

QUESTIONS SUBMITTED BY SENATOR PROXMIRE

SBSS Status Under SDI

QUESTION: Prior to the advent of the Strategic Defense Initiative (SDI), the Air Force planned to begin procurement of the Space-Based Surveillance System (SBSS) in the late 1980s, leading to an operational capability in the early 1990s. Will this schedule be continued under the Strategic Defense Initiative?

ANSWER: Yes. Under the SDI, the SBSS space defense requirements and SDI mid-course surveillance and tracking requirements will be satisfied by a single program identified as the Space Surveillance and Tracking System (SSTS). [Deleted] [deleted.] However, any major delays in the SDI SSTS effort will increase schedule risk and jeopardize efforts to satisfy the space defense mission.

SBSS and ABM Treaty

QUESTION: The inclusion of the SBSS in the SDI indicates that this system is now considered to be justified on the basis of its contribution to defense against strategic ballistic missiles. If the original procurement schedule will be followed, how will this activity be reconciled with the ABM Treaty prohibition on the development, testing or deployment of space-based components?

ANSWER: Inclusion of SBSS in SDI indicates recognition that the SBSS technology is also applicable to the mid-course surveillance requirements associated with defense against ballistic missiles. However, the space defense surveillance requirements remain an important part of the total requirements for the SDI Space Surveillance and Tracking System (SSTS). The original procurement schedule for SBSS (now SSTS) could be followed without violating the ABM Treaty because we are demonstrating technology. We will not violate the ABM Treaty because we do not intend to test in an ABM mode. At this time, however, we have not decided to deploy either a space surveillance system or a BMD system.

SBSS Operational Requirements

QUESTION: If the original SBSS procurement schedule will not be adhered to under the SDI, what measures will be taken to meet the operational requirements that this system was intended to satisfy?

ANSWER: If the decision is made to deploy a space surveillance system the original SBSS procurement schedule could be adhered to under SDI. An initial 12 to 18 month definition and analysis of the additional surveillance requirements associated with SDI is underway. No additional measures to satisfy SBSS operational requirements are required because the SDI Space Surveillance and Tracking System (SSTS) includes the SBSS operational requirements.

SBSS and ASAT

QUESTION: Will failure to deploy the SBSS impair the operational effectivness of the F-15 anti-satellite Space Defense System?

ANSWER: The F-15 air-launched miniature vehicle anti-satellite system does not depend upon deployment of the Space-Based Space Surveillance System (SBSS) to perform its mission; however, if the SBSS were available, it would enhance the capability of the ASAT system to engage the next generation of satellites if they use advanced survivability aids.

AWS and SDI

QUESTION: What will be the impact of the transfer of the Advanced Warning System project to the SDI on plans for developing a follow-on [deleted.]

ANSWER: The objective of the Advanced Warning System (AWS) program was to define new system options [deleted] [deleted.] The higher level of outyear effort currently planned under the Boost Surveillance and Tracking System (BSTS) effort can still provide the option for the Full Scale Development of a follow-on [deleted] by FY87-88 and thus an Initial Operational Capability by the early 90s, the approximate schedule under the former AWS program.

SDI Coordination With AWS

QUESTION: Does the Strategic Defense Initiative Office presently have plans to maintain coordination with the Air Force to insure that there is no negative impact from the reorientation of the Advanced Warning System project?

ANSWER: The Boost Surveillance and Tracking System (BSTS) is the SDI program which will not only develop and demonstrate the technology necessary for detection, tracking, and targeting of boosters during powered flight but will also provide survivable and cost-effective ballistic missile Tactical Warning/Attack Assessment (TW/AA) which was the original goal of the Advanced Warning System (AWS) project. The Air Force will conduct the BSTS effort for the SDIO and thus will be directly involved in maintaining coordination between the SDI mission needs and those of TW/AA.

Airborne Optical System and ABM Treaty

QUESTION: The Airborne Optical System will provide an air-based sensor platform for targeting mid-course interceptors. How do you reconcile the development and testing of this system with the prohibition in the ABM Treaty on the development or testing of air-based ABM components?

ANSWER: The Airborne Optical Adjunct (AOA) will not provide an air-based infrared sensor platform for targeting of mid-course interceptors. The AOA, in conjunction with a terminal imaging radar, could provide for targeting of terminal interceptors. Since the AOA cannot provide for targeting of terminal interceptors alone, it is not an ABM component and, therefore, does not violate the ABM Treaty.

Airborne Optical First Flight

Question: What is the present target date for the first test of the Airborne Optical System using a realistic target system?

Answer: The first test of a full tactical-like AOS using a realistic target system has not been determined. A contract award for the AOA demonstration program is scheduled for 1 August 1984.

ERIS and Missile Warheads

Question: Will the Exo-atmospheric Reentry Vehicle Interception System (ERIS) investigate the use of multiple warheads launched by a single rocket?

Answer: No, field testing of a multiple warhead approach is prohibited by the ABM Treaty. Furthermore, the DTST (Fletcher Study) analyzed mid-course interceptor concepts and concluded that a ground-based single warhead design was the best approach to be pursued.

ERIS Leverage

Question: If not, does this not ignore a major potential source of defense leverage?

Answer: No. As stated earlier, the DTST examined the interceptor concepts and concluded that a ground-based single warhead interceptor design was the best approach to follow.

ABM Treaty Impacts

Question: If it will, how will this work be conducted in accordance with the prohibition in the ABM Treaty on the development or testing of ABM interceptors with multiple warheads?

Answer: A multiple warhead mid-course interceptor design is not being undertaken. The program to be followed is in full agreement with the ABM Treaty.

Electromagnetic Gun

Question: The Electromagnetic Rail Gun project will investigate the use of projectors capable of firing large numbers of interceptor kill vehicles in very short periods of time. How do you reconcile this effort with the prohibition in the ABM Treaty on the development and testing of methods for the rapid reload of ABM launchers?

Answer: Research into new technology with potential ABM applications is permitted up to the stage when field testing begins. Under the SDI, our reseach work on electromagnetic rail gun concepts will be conducted in full compliance with the ABM Treaty.

STRATEGIC DEFENSE INITIATIVE

QUESTION: Please outline the fields in which there is potential for cooperative development with our Allies of technologies under the Strategic Defense Initiative.

ANSWER: There are opportunities for cooperative technical developments with our Allies in many different fields of the SDI. A few of the many examples of technologies which our Allies are very actively pursuing are: space transportation, infrared sensors, and high speed computers.

QUESTION: What is the present status of negotiations with our Allies for cooperative development with our Allies of technologies under the Strategic Defense Initiative?

ANSWER: No formal negotiations have begun. However, Secretary Weinberger has told the other NATO defense ministers that the U.S. would welcome their cooperation, and some informal bilateral discussions have taken place.

QUESTION: What is the planned schedule for cooperative development with our Allies of technologies under the Strategic Defense Initiative?

ANSWER: It is simply too soon to have any schedule for cooperative development with our Allies.

QUESTION: Does it make sense to develop technologies for the defense of our Allies in the absence of a major effort on their part?

ANSWER: Yes, the technologies that could be used to defend our Allies would be pursued in the absence of a major effort on their part since these technologies are the same or similar to the technologies needed for strategic defense of CONUS and the defense of the U.S. forces abroad.

QUESTION: How do you reconcile joint work with our Allies on the Strategic Defense Initiative with the limitations in the ABM Treaty on the transfer of ABM components and blue-prints to other countries?

ANSWER: We do not anticipate that ABM components and blue-prints would be transferred to our Allies or that any aspects of the Strategic Defense Initiative will be in violation of the ABM Treaty.

Question: The issue of countermeasures to ballistic missile defenses is of course a very important one. What steps have been taken to insure adequate coordination between the Strategic Defense Initiative and the Air Force Advanced Strategic Missiles Systems (ASMS) Office?

Answer: The existing working agreement between the Air Force Space Laser Program and the ASMS Office will be refined and expanded to cover Strategic Defense Initiative issues such as countermeasures. We plan to take full advantage of all the capabilities of the ASMS program.

Question: Would it be productive to establish a formal reciprocal review procedure between the SDI and ASMS offices, to insure that US strategic missiles will be capable of penetrating current and projected Soviet defenses, and that US missile defense developments are responsive to the current and projected Soviet threat?

Answer: Yes, such a review procedure is contemplated.

Question: What sort of oversight procedure would you suggest to referee this process.

Answer: The SDI advisory panel being established by the Director will routinely review the results of our threat definition activities to insure their objectivity.

Air-Breathing SDI Threat

QUESTION: What is the status of efforts to develop a program comparable to the SDI for defense against the air-breathing threat?

ANSWER: The Fletcher Study identified the need for an air defense complementary to a ballistic missile defense. OSD initiated an Air Defense Study on 1 October 1983, headed by William Delaney of the Massachusetts Institute of Technology's Lincoln Laboratory. The study group has completed their work and they concluded that the technology development required for air defense is less demanding than that for ballistic missile defense. We are now in the process of developing specific program proposals for air defense against the Soviet strategic bomber and cruise missile threat.

Coordination Between Air and Missile Threats

QUESTION: What procedures are contemplated to insure the close coordination of the efforts to implement defense against missile and air-breathing threats?

ANSWER: A defense against the ballistic missile threat would be a logical complement to a defense against the air-breathing threat. A ballistic missile defense would contribute to a defense against supersonic bombers and cruise missiles in at least three ways:

1. Provide protection of the air defense elements from ballistic missile attack.
2. Provide surveillance and tracking of high altitude supersonic aerodynamic threats.
3. Possibly support the intercept of supersonic threats.

An OSD-sponsored study will soon be underway to take an integrated look at ballistic missile, space, and air defense.

Air Defenses

QUESTION: Does it make sense to deploy a robust defense against the air-breathing threat prior to the implementation of defenses against the missile threat?

ANSWER: There are no plans at this time to deploy a robust, U.S. defense against Soviet air breathing threats. Because an effective defense against Soviet ballistic missiles is, according to the technologists, the more difficult capability to achieve, and because ballistic missiles are potentially more destabalizing, priority is being given to an examination of those technologies that might prove effective against this threat. In view of the current Soviet nuclear force structure, which emphasizes ballistic missiles, not air breathing forces, the deployment of a robust air defense system would only occur in conjuction with the deployment of an effective defense against ballistic missiles.

Defenses and First Strike Incentives

QUESTION: You say that BMD would eliminate the ability of the opposing side to carry out a successful first strike. Well, let's say we set up a missile defense system. You know the Soviets will have their own defense system. The OTA report noted that "BMD ends up being a better investment for the side that strikes first than for the side that retaliates." If the Soviets strike first, part of our ICBM force will be destroyed, and the part that's saved by our BMD will be used to retaliate. But the Soviet BMD under this scenario would have fewer U.S. retaliatory weapons to hit. What's more the Soviets would be fully forwarned and prepared for our retaliation. So doesn't BMD provide an incentive for a side to strike first and have the advantage?

ANSWER: The senerio you describe is valid only if the defenses deployed by both sides are ineffective (that is, have relatively high leak rates) and are defending retaliatory assets that have little inherent survivability. The scenerio also assumes that the attack uncertainties which are created by defensive deployments would have no effect on the decision of a nation to launch an attack in the first place. The Strategic Defense Initiative seeks to identify technologies which could support the deployment of effective defenses against ballistic missiles. Such defenses, by eliminating the military utility of ballistic missiles, would also eliminate the potential advantages of first strike attacks. Under these circumstances, deterrence and stability would be greatly enhanced.

Defenses and Nuclear Winter

QUESTION: Let's say that this defensive system is 90 percent effective, which I think is being very optimistic. That means that about 800 Soviet warheads may still hit the U.S. Have you investigated the effects of nuclear winter? Scientists believe that the detonation of just 500 to 2,000 warheads might create a climatic catastrophe that will kill us all anyway. Have you factored the nuclear winter phenomenon into all these predictions about what Star Wars will do for us? It may be we would spend hundreds of billions of dollars for a slow death instead of a quick death.

ANSWER: There has never been a shortage of reasons for avoiding nuclear conflict. A potential nuclear winter is just one more in a very long list of reasons. What we must strive for is not so much the means of mitigating the adverse effects of nuclear war, as the means of preventing such a war from ever occuring. By reducing or eliminating the military effectiveness of ballistic missiles, effective defenses can make the outbreak of such a war far less likely.

ABM Treaty and Stability

QUESTION: You say that deploying these ballistic missile defenses will "improve stability." How does destroying one of the most important arms control treaties that we've ever signed with the Soviet Union--the 1972 Anti-Ballistic Missile Treaty--improve stability? The Administration has alleged that the Soviets are violating the ABM Treaty and that this is creating instability. How does our abrogation of the ABM Treaty create stability?

ANSWER: The ABM Treaty today makes an important contribution to strategic stability. Widespread deployments of the types of defensive systems that the U.S. or Soviet Union could field today would encourage the proliferation of offensive forces, because the level of effectiveness of these defenses is such that proliferation could serve to maintain the effectiveness of offensive forces. However, in the future, if it proves possible to develop an effective defense against ballistic missiles--a defense that provides strong disincentives against proliferation--then the security of the world would be enhanced by fashioning an offensive and defensive arms control environment that would go beyond the ABM Treaty. Clearly, it would make little sense to deny ourselves a safer world by forever remaining limited by treaties that are in our interest today, but which could become anachronistic in the future. We should use arms control treaties as tools to enhance stability; they should not be allowed to act as impediments to that purpose.

The SDI program is intended to explore the potential of advanced technologies to support the development of an effective defense against ballistic missiles. However, until we understand this potential and are confident that it can be effective, it is in our interest to maintain the ABM Treaty. Consequently, the program is structured to be fully consistent with the provisions of that treaty. Our concern with Soviet violations of the ABM Treaty relate to the effect this ultimately might have on stabilility in today's strategic environment and what such violations might mean in terms of the extent of Soviet dedication to the viability and future of arms control.

STRATEGIC DEFENSE INITIATIVE

QUESTION: You mention at one point in your statement that the defense system you are shooting for would be a "low-leakage" system. How low would that leakage be?

ANSWER: It is premature to speculate on "lowest attainable" leakage rates in the absence of a mature technology base which permits selection of the most promising concepts for various ABM functional needs. While an anti-ballistic missile defense system capable of destroying all RVs launched against the U.S. and its Allies is probably not attainable, imperfect, but effective defenses can significantly enhance deterrence. For example, imperfect but effective defenses can play havoc with carefully orchestrated attack plans required for a successful disarming first strike. At worst, defenses can create uncertainty as to the likely success of an attack, and at best, deny attack objectives. Effective defenses can also create incentives to pursue major arms reductions. Deterrence can, therefore, be significantly enhanced by effective, although not perfect, defensive systems. Thus, the goal of the SDI is to develop a defensive system that is: (1) effective against a responsive threat; (2) affordable; (3) cost-effective; (4) adequately survivable; and (5) consistent with U.S. and Allied security goals.

Deployment of "Suitcase Bombs"

QUESTION: After we've spent hundreds and hundreds of billions of dollars on this elaborate missile defense system, what's to prevent the Soviets from sending nuclear weapons over in packing crates and diplomatic pouches or slipping them across the endless miles of U.S. border. They could plant small portable bombs at military targets and cities across the country. Are we going to trust the Soviets not to do this?

ANSWER: While defenses against ballistic missiles have the potential for significantly enhancing deterrence and stability, such defenses alone, cannot be viewed as the answer to all the security problems faced by the United States and our allies. However, the use of small, concealable nuclear devices by the Soviet Union as a means of circumventing effective defenses against more conventional offensive nuclear forces does not appear promising. To do this effectively (that is, in a manner that would have an adverse effect on our deterrent capability), would require the successful planting of such nuclear devices throughout the entire U.S. strategic military structure--a very doubtful proposition at best. In any case, even if such an option were feasible, because it also could be very usefully employed in an offense dominant world, its attractiveness to the Soviet Union would not be appreciably increased by the presence of effective defenses.

STRATEGIC DEFENSE INITIATIVE

QUESTION: Give me a rough estimate of all the equipment we're going to have to deploy for this missile defense system. The OTA report estimated in a hypothetical case that we'd have to deploy 170,245 assorted warning satellites, laser satellites, trackers, interceptors, radars and aircraft for the system to work. What's your figure?

ANSWER: To provide even a rough estimate of the force structure of a hypothetical ABM system needed to support a postulated strategy is at best premature. We will begin to define representative force structures for candidate strategies in FY85. As the technology matures over the remainder of this decade, we will be able to predict with some confidence what effectiveness to expect from the individual force elements and, therefore, how many might be needed to implement a given strategy. The 170,000 articles (168,000 of which are midcourse and terminal interceptors) that the OTA report postulated was a force structure dominated by a number of questionable assumptions and as such is an artifice created to support its conclusions.

QUESTION: As the OTA report notes, Soviet missile defense satellites can easily become ASATs that could be used to punch a hole in our defensive constellation to let Soviet missiles go through. In fact, the report notes that directed energy weapons might well be better offensive weapons than defensive weapons. How are we going to insure that the Soviets won't turn their defensive weapons on us to launch a first strike? After all, our satellites up there could well be sitting ducks.

ANSWER: If the Soviets lose their first strike advantage in making such an attack, the military advantage achieved may be at best transient since the alerting of our military forces would allow measures for survival that deny the military objective of the offensive strike. Further, since we are unlikely to deploy defensive forces that are "sitting ducks," the Soviets would also face the uncertainty of not being able to adequately orchestrate a time sensitive defense suppression attack. We recognize that the system's capability to survive until its mission is completed is crucial. The potential outcomes mentioned above and many others will be thoroughly evaluated as the SDI program evolves.

Effects of High Altitude Nuclear Detonations

QUESTION: General Abrahamson, you mentioned in your testimony that in setting up our terminal defense we must be prepared for attacking warheads that are salvage fuzed -- that is, the warheads will detonate when our interceptors hit them. Even if these warheads detonate at high altitudes what would be the EMP effect? Couldn't this cripple our defenses? Some have said that this EMP effect could cause dangerous accidents in our nuclear reactors that could cause severe casualties in our nearby populations? Have you considered this? Have you considered what all these detonations will do to our ozone layer? Will we still be suffering deadly climatic consequences even if we hit these warheads high in the atmosphere?

ANSWER: a. There would be EMP generated but the expected damage is dependent on many parameters such as the altitude of burst, warhead type, yield, and the amount of EMP hardening incorporated into the system of concern. Because the United States has an active program within the Department of Defense to harden systems to the high altitude EMP threat, we believe our defenses will withstand the projected EMP environment from salvage fuzed detonations.

b. Preliminary analysis indicates that we should be able to protect nuclear reactors from dangerous accidents caused by high altitude EMP but further studies are necessary before we can finalize this conclusion.

c. Work on climatic effects and their consequences is very preliminary with large uncertainties in both the physics and chemistry of the atmosphere. But it can be said that high altitude detonations have much less impact on the climate than would ground bursts. It is believed that the most important contributions to atmospheric effects are lofted soot, smoke and dust; none of which would result from high altitude bursts. These bursts could have some effect on the ozone layer and we have programs on-going to study this phenomena.

Will SDI Protect Missiles or Cities?

QUESTION: During this transition phase, will our defensive system be used mainly to protect our missiles and not our cities? If that's true, then would you agree that this phase of the Star Wars system wouldn't save lives or limit damage, because the Soviets could simply retarget to our population centers, which wouldn't be protected?

ANSWER: The SDI program is a research program this is designed to explore the potential of defensive technologies. We are a long way from making any development or deployment decisions, least of all making any determination as to the defense system's configuration and operational mission. In any case, if the Soviet Union were to retarget its nuclear forces against U.S. population centers, it would be done out of recognition that their nuclear forces were no longer effective against military targets. This fact, and the Soviet recognition of it, would significantly raise the threshold of nuclear conflict and strengthen deterrence.

Consistency of SDI with U.S. Treaty Commitments

QUESTION: Do any of the budget requests entail programs, which might violate the 1972 ABM Treaty, the 1967 Outer Space Treaty, or the 1963 Partial Test Ban Treaty?

ANSWER: No. The SDI program is fully consistent with all current U.S. treaty commitments.

STRATEGIC DEFENSE INITIATIVE

QUESTION: It has been estimated that a multi-layered ballistic missile defense system could cost up to a trillion dollars. What's your estimate?

ANSWER: As stated earlier, no reliable estimates of the eventual cost of a multi-layered ballistic missile defense system that might result from the SDI are available. Our first attempt to create a relatively firm cost estimate will most likely be made in the early 1990s when we expect the President and the Congress to decide whether to initiate system level development in support of a specific defensive strategy.

QUESTION: How much extra would it cost to also defend against cruise missiles and bombers?

ANSWER: It is not possible to make such an estimate now since uncertainties in the types of systems that might be deployed, the defensive strategy to be supported and other considerations make cost estimates at best misleading. One should expect that many of the major advances in technologies relevant to the SDI would benefit air defense development as well.

SUBCOMMITTEE RECESS

Senator STEVENS. The committee will be in recess unitl tomorrow at 10 a.m.

[Whereupon, at 11:15 a.m., Tuesday, May 15, the subcommittee was recessed to reconvene at 10 a.m., Wednesday, May 16, 1984.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1985

WEDNESDAY, MAY 16, 1984

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m. in room SD–192, Dirksen Senate Office Building, Hon. Warren Rudman presiding.

Present: Senators Rudman and Andrews.

DEPARTMENT OF DEFENSE

RESEARCH AND ENGINEERING

STATEMENT OF HON. RICHARD D. DeLAUER, UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING

ACCOMPANIED BY:

- HON. JAY R. SCULLEY, ASSISTANT SECRETARY OF THE ARMY FOR RESEARCH, DEVELOPMENT AND ACQUISITION;
- GERALD A. CANN, PRINCIPAL DEPUTY ASSISTANT SECRETARY OF THE NAVY FOR RESEARCH, ENGINEERING AND SYSTEMS;
- MARTIN F. CHEN, PRINCIPAL DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE FOR RESEARCH, DEVELOPMENT AND LOGISTICS

JOINT WEAPONS PROGRAMS

OPENING REMARKS OF SENATOR RUDMAN

Senator RUDMAN. This is the time scheduled to review a number of joint weapons programs—most of them Navy and Air Force missiles. This caps a series of budget reviews focusing on the Department's acquisition programs.

Today, we have Dr. DeLauer, the Under Secretary for Research and Engineering, as our principal witness, accompanied by a number of backup witnesses from the services. Today's hearing may be a bit chopped up because we have a Joint Session of Congress at about 11 o'clock. So we will probably move along as quickly as possible.

We note receipt of the President's deficit reduction package which did cut back some of the programs to be discussed today.

Dr. DeLauer, we certainly want to commend you for your prepared statement for the hearing. It deals effectively with some of the very real problems involved with joint programs and some of the solutions to these problems, particularly in the area of program stability. I hope you will address this area in your opening summary.

If you would like to proceed to introduce your backup witnesses, we will then proceed with the testimony. I expect that the chairman of the subcommittee, Senator Stevens, will be along in the next 15 or 20 minutes.

INTRODUCTION OF ASSOCIATES

Dr. **DeLauer**. Thank you, Mr. Chairman.

On the far right is Marty Chen from the Air Force, Jerry Cann from the Navy, and Jay Sculley from the Army. Behind me are the rest of the guys and ladies.

Senator **Rudman**. Your normal cast of thousands.

Dr. **DeLauer**. The normal cast of thousands as we say.

Mr. Chairman, I would like to submit my statement for the record, and I will just summarize it.

Senator **Rudman**. Your entire statement will be printed in the record.

Dr. **DeLauer**. Then we will get going.

ADVANCEMENTS IN WEAPON TECHNOLOGY

This is, I guess, about the second year that we have been over and reviewed with Congress these joint programs. I think that it is becoming obvious to all of us in the business that as a consequence of some of the advancements we are making in our weapon technology and in the ability to be able to handle all sort of information, that more and more interoperability and joint programs are going to be the rule instead of the exception.

This is kind of the forecast. How we are doing in reaching that forecast, I think is spotty. The reason it is spotty is the fact that it is reasonably revolutionary compared to the past. The concept of separate service, defining areas of operation and, therefore, the needs and resources, as well as equipment has been in existence ever since the 1947 act that created the Department of Defense.

On the other hand, it is clear, when you examine in detail—particularly in the tactical area—that so much of the information is needed by more than one service, and the ability to respond to that information is getting to the point where the only thing that is affordable are programs that can be utilized by more than one service.

JOINT ACTIVITIES

Let me first relate to you a few high points in regard to these joint activities, and I want to make a distinction among joint activities, joint programs, and programs that are run by one service, but the output is used by more than one service.

There are about 100 related systems that we now have in the Department of Defense that can fall in the category of joint activities. Which ones you define as successful, and which ones you define as unsuccessful are, I think, the hardest things to do. Sometimes they stay within money and yet the results are not very good. The other times they take longer and cost more, but on the other hand the end result is very good.

Let me digress for a minute and give you a little historical background. I guess it was 31 years ago, in 1953, I was a lieutenant, working in the Bureau of Aeronautics, I was in charge of all air launched missiles from a tactical standpoint. At that point, the forerunner of the White Hope was the Sparrow program.

There was a competitor, not from the Army or from the Air Force, but from the Navy. Bill McLean out in China Lake was developing a missile called the Sidewinder. So to try to get a joint program with the Navy was hard enough. As it turns out, we ended up with both of those missiles; they are now the AIM-7 and the AIM-9.

They have been in existence for over 31 years. They are used by all services. They are used by almost all countries. We can sell more than we can make. It took a long, long time for those programs to reach to the point where indeed everybody embraced them and said that they were needed.

I think the other highlight of an example of a single program that turned to one of multiuse is the F-4. The F-4 has probably been the most successful aircraft program that has been over produced in our system. It is used all over the world. It is used by almost all of our allies in one form or another. It is an airplane that was developed by the Navy, and then the Air Force acquired it. It was the backbone of their fighter forces for a long, long time.

So there are a lot of good and successful programs that started out on a rocky road.

A few points with regard to joint programs. The problem is that while it may be obvious to some of us in the R&D community and in the acquisition community that a program can be joint, and perhaps should be, it really cannot be forced upon the system.

The system has to embrace the need, and in many cases this represents one of the services, or two of the services getting together on joint operational use and joint doctrine. This normally should come out of the efforts of the Joint Chiefs of Staff, and I think that this is where we are making some progress.

ATTACK OF FOLLOW-ON FORCES

One of the programs that you will probably want to discuss a little further is the Attack of Follow-on Forces, loosely referred to as Assault Breaker when it was a development program. When broken down in its elements, we have things called JTACM, JSTARS, and that sort of thing. That was one that was probably the most far reaching in changes of operational doctrine between the Air Force and the Army.

That program has gotten a lot of attention by both the Senate and the House. The House Armed Services Committee has done a surgery job on the thing. On the other hand, I can report to you that the Air Force and the Army, for the very first time, have really gotten together at the very senior level, i.e., the Chiefs level, to come up with a set of agreements that have been reviewed by the Joint Chiefs and blessed by the chairman.

This set of agreements is in the formative stages and it will be the basis for their submission for the 1986 budget. We will discuss it and argue about it this summer in the POM process. But this is really the first time, at least in the last 3 years, where they have taken the initiative and they have focused in on some very tough decisions of who is to do what, including to the degree of target assignment, and things like that.

So I think that we are making some headway, but this is really only a progress report about some of the joint programs. In many cases, I will have to answer your questions.

We have involved the Commanders-in-Chief, the CINC's, much more in the DRB process, which is where we allocate the resources they have had in the past. They make their priorities well known. They focus in. In many cases, they have to fight the battles with the joint forces, and therefore they have requirements in many cases that you don't see showing up when each individual service looks at their plan.

All of these lead to the view that the future is going to be more joint programs, and not less. There is just no question in the Secretary's mind that he would rather have joint programs than parallel programs. He does not support the allocation of resources on programs that are very closely related to one another, and yet are going off on different paths of acquisition. As a consequence, he has made it clear during all of the deliberations he has had with the service Secretaries and with the rest of us, that where joint programs are needed he is going to support them.

With that, Mr. Chairman, why don't I just open it to questions, unless my colleagues here might want to add a thing or two to my opening statement.

[The prepared statement of Mr. DeLauer follows:]

PREPARED STATEMENT OF RICHARD D. DELAUER

UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING

The historic intent of the Congress remains as clear today as it was in its early charge to the Secretary of Defense -- to assume responsibility for enhancing effectiveness, economy, and efficiency in management activities common to more than one military department.

What is different is that vastly greater threats now demand cooperation and efforts to achieve combined effectiveness in ways which could not have been foreseen when Congress enacted the DoD charter into law.

At the same time, technology and advances in management now offer opportunities which previously appeared to be beyond our grasp. These include chances for joint activities to help significantly in offsetting the dangerous superiorities which continue to confront us -- and our allies.

This does not mean joint ventures or new technology as ends unto themselves. To the contrary, it means asking specific questions about both, the most important of which is, "Where will investment in these tools make a real difference?" This is the first criterion for joint programs.

Economy and efficiency are still cornerstones of any cooperative effort. But the bottom line must remain combat effectiveness. Achieving that goal at the lowest possible cost is our common purpose.

Doctrinal Foundation

The right people must also answer questions about how we should achieve maximum effectiveness. As with other programs, joint system acquisition strategies should evolve in parallel with modern military concepts. Service doctrine is the basis for force employment in service-unique environments. Where capabilities overlap or allies are involved, the services develop joint or combined doctrine -- responding to the operational needs of our military commanders.

The second criterion is: "Will the joint effort support our military doctrine?" The field commanders -- the Commanders in Chief -- along with the Joint Chiefs of Staff are responsible for force employment, and we have involved them in the deliberations of the Defense Resources Board as never before in every step in the Planning, Programming, and Budgeting System cycle -- and in defining DoD's research and development objectives.

The Defense Science Board has taken a fresh look at how all this is working with respect to joint programs. The board credits us with relatively high rates of success, particularly for smaller programs. But they stress that we must do more to reinforce the foundation of doctrinal and joint requirements needed for joint programs.

The Chairman of the Joint Chiefs of Staff is moving ahead with initiatives to improve the Joint Staff capability to provide support in this area.

Mission Area Framework

When program participants share a clear perception of common needs, there is a good chance of moving important capabilities into the field. Programs failing to get off the ground usually lack agreement on these basic points. This calls for a third criterion, namely: "Is there joint agreement on the mission needs?"

The 1981 Acquisition Improvement Program and Planning, Programming, and Budgeting System reforms both seek to reorient the top management structure of DoD on cross-service mission planning. My duties include naming lead components for joint programs, and I must ensure that there is a mission basis for service collaboration. My first act was to reorganize the Office of the Under Secretary of Defense for Research and Engineering accordingly--to include integrating command, control, communications, and intelligence activities into offices that oversee cross-service combat functions. I also set up staffs to provide integration of conventional initiatives and munitions.

We are doing better at this. New program starts, acquisition improvement issues, and service program objectives are now evaluated on a mission basis when the Defense Resources Board assesses the program objectives of the services and agencies in the summer. But we must do more throughout the management cycle. The Congress also plays a critical role, particularly when it focuses on cross-service missions -- as this committee has done.

All managers must see that individual service capabilities fit into such operational frameworks. If we don't begin there, joint programs can't put their best foot forward at the start, at justification time, or in defeating the enemy.

The Scope of Joint Programs

We have a very large number of cross-service activities ongoing. Many such efficiencies do not, and need not, receive top management oversight. Sufficient guidance comes from decentralized authority.

Defense agencies, such as DLA, DIA, DCA, DMA, NSA, DARPA, and DNA, managers for intelligence activities, and other functions attend to countless joint programs. The military departments are quick to reap savings through hundreds of executive agency, single manager, lead service, and delegation of authority functions which are obviously practical.

In the case of numerous smaller systems and items routinely developed and produced in a joint fashion, the main question is: "Does it make sense?" This is the fourth, and last, criterion for joint programs.

Often it makes sense to narrow the scope of joint efforts by making as many components as possible of one service's system the same as those of another service. It also makes sense to look beyond single system collaboration.

Advanced battle management technologies and other means for integrated cross-service and cross-national coordination now provide opportunities to embrace broader areas. Significant force multiplier effects are possible through coordination among weapons; timely target acquisition; better data fusion capabilities to consolidate intelligence; and improved communications between sensors, command posts, and weapons.

Exploiting new thrusts in these areas does not mean discarding old lessons. To the contrary, the potential of technology strengthens the need to apply simple criteria for joint undertakings.

To satisfy the criteria, services do not have to band together for the entire life cycle of a program. They can, and do, join together at any point in the process where it makes management sense to do so.

For example, the AIM-9 Sidewinder and AIM-7 Sparrow air-to-air missile programs were not joint from cradle to grave. Sidewinder has been evolving for 34 years, but became a joint program only 14 years ago. The Army, Navy, and Air Force have cooperated in production of more than 100,000 Sidewinder or Sidewinder-derivative missiles.

Management For Operational and Technical Requirements

Agreement on operating and technical requirements for major systems does not come easily. Valid differences do exist among services on environmental requirements, integration with existing platforms, and many other standards.

Top management must not hesitate to make use of special management bodies to alleviate such problems. The Cruise Missile Executive Committee is an example. In 1982, the Command, Control, and Communications Executive Committee was established to provide cross-service coordination in another complex area. The DoD-wide Munitions Council was chartered last summer to coordinate acquisition strategies as well as common operational and technical requirements.

The DoD Armament/Munitions Requirements, Acquisition, and Development Committee was chartered to harmonize service requirements for munitions and associated sub-system needs. Accomplishments toward interoperability and commonality are significant and include: Coordination and staffing of the Joint Service Operational Requirement for common fuzing of 20-40mm ammunition; harmonizing Air Force/Navy FMU-139 common bomb fuze; establishment of the GATOR mine joint program, and interoperability assessment of one service's ammunition in another service's weapons. Other current areas of involvement include the 8-inch SADARM, SM-762 Electronic Time Fuze, VOLCANO Mine Dispenser, FLIPPER auxiliary mine dispenser for GEMMS, ejection and stores racks, and aerial targets.

In some cases, it also makes sense to focus broad based research and technology efforts toward a specific goal. This is so with the Strategic Defense Initiative Executive Committee. More mature evolving mission areas sometimes require management support, like that provided by the Interdiction Executive Board, along with the Joint Interdiction Working Group.

This can be, and often is, complemented by special service management support. In the interdiction mission area, the Joint Tactical Missile System Program was established by merging the Army's Corps Support Weapons System Program and the Air Force's Conventional Standoff Weapon Program. The Joint Surveillance and Target Attack Radar System Program was similarly formed by joining already initiated Army and Air Force programs -- the Stand-Off Target Acquisition System and Pave Mover. The Army and the Air Force formed a force development group to integrate operational and technical requirements related to these and other programs.

The antiarmor mission is another element of air/land combat that clearly needed more focused cross-service oversight if there was to be timely rationalization of operational and technical requirements. An antiarmor master plan steering group was formed recently to help do this.

Many mission-oriented management bodies centered on technical areas may need to be kept active over a long period, such as, the Command, Control, and Communications Review Council, supporting the Command, Control, and Communications Executive Committee and involving eight different panels. Others may not -- such as the Joint Tactical Fusion Program, designed to expedite fielding of the Army's All Source Analysis System and the Air Force's Enemy Situation Correlation Element.

The Broad-Area Surveillance Executive Committee is an example of co-chaired oversight -- in this case, by the Under Secretary of Defense for Research and Engineering and the Director of Program Analysis and Evaluation -- to provide top management aid to an inherently cross-service problem of very large scope, involving maritime surveillance.

Management For Individual Programs

At the other end of the management spectrum, few things are as important as the selection of the men and women to staff individual joint program Offices. Large joint programs are almost always run by such offices -- on which extraordinary demands are made.

The oversight role of the Joint Logistics Commanders for this level of management is critical. This very senior cross-service acquisition body sets the standard and pace for individual joint program management. It meets regularly and reviews activities and recommendations of some 50 subgroups reporting to it.

An example of specific action at the major program level where the Joint Logistics Commanders played an important part involved the three versions of the H-60 series helicopters. The UH-60 Black Hawk developed by the Army, the Navy's Sea Hawk SH-60, and the Air Force's Night Hawk HH-60D are now derivative helicopters using the same basic airframe and engine. The three service program managers continue to coordinate to ensure maximum commonality in addition to the economies of scale already achieved.

Top management can do more to help seek out cases like this where one service's development can have broad applications. The High-Speed Antiradiation Missile program saved one service about $400 million that would have been spent for a separate development program and promises to save the Navy and Air Force over $1 billion in procurement costs.

We have to search beyond the major system level as well. The F-110 engine was developed as a fighter derivative version of the Air Force B-1 bomber's F-101 engine. Its increased durability and life-cycle costs have obvious appeal for the Navy.

We also cannot neglect test and evaluation across services. Thirty joint tests have been started since the Joint Test and Evaluation Program was initiated. Current tests include Identification Friend, Foe or Neutral; Joint Forward Area Air Defense; Joint Logistics Over The Shore; Electro-optical Guided Weapons Countermeasure, Counter-Countermeasure Program; Command, Control and Communications Countermeasures; and Data Link Vulnerability.

Much more needs to be done in establishing common standards in the test area -- as well as in the logistics support for our systems -- to advance technical compatibility and interoperability.

We also should put into place better cross-service review procedures to follow up on both motivation and discipline at every level. The Joint Logistics Commanders are working at the program level and studying schedule, cost, and performance of more than 80 joint programs; personnel issues; and other factors. By this summer, they should have useful results.

Procedures we adopt must remain flexible enough to motivate parties to cooperate and exploit technological opportunities.

Management For Technology

The Joint Logistics Commanders oversee the technology base coordinating mechanism which establishes and monitors joint service development concepts at the very front end of the acquisition cycle. The Joint Directors of Laboratories, which collectively oversees 45 of our service labs, meets quarterly and recommends joint efforts to the Joint Logistics Commanders to best serve the common good. Much coordination also takes place at the working level within the services -- and significant information is exchanged regularly.

The Defense Science Board found that technology base programs are coordinated in essentially all areas of mutual interest and that a fair number are joint. Such joint programs are inherently easier to sustain, because of their relatively low funding -- if one partner falters, this is more manageable than in the case of major programs.

In selected technology base areas where potential is very clear, we do not hesitate to create special management and funding procedures. The Very High Speed Integrated Circuit program, the Ada high order computer language program, and the computer software initiative program are such areas -- with joint program offices established under management of the Office of the Secretary of Defense.

Formal bodies are also set up to coordinate complementary efforts by the services, if useful. The Advisory Group on Electronic Devices, the Joint Army, Navy, NASA, Air Force Interagency Propulsion Committee, and the Joint Services Guidance and Control Committee are examples. Resources are also conserved through yet another form of joint technology base management centered on specific technical areas. These are programs which receive coordinating support from the Office of the Under Secretary of Defense for Research and Engineering, as well as from other specialists, in areas such as materials and structures, joint atmospheric transmission, DoD food program, chemical warfare program, joint technology demonstration engine program, the joint services small arms program, the infectious disease program, and others.

With this said, it is important to recognize that overlap and redundancy in technology base management is a strength. We must not rigidly apply the same criteria to technology programs that we do to major systems further along in the acquisition cycle.

Management for Stability

If criteria for pursuing joint programs are met, operational and technical requirements are clearly established, a top-flight program manager is assigned, and the technology is at hand and effective, then the chances for program success are significantly improved, but certainly not assured.

As a general rule, any given program is not likely to be equally important to top management in two or more services over the long haul. When a sizeable spending reduction is required in a service's budget, a major joint program can abruptly shift from being a "core" element of that service's program to "marginal" status.

In the development phase, the resultant funding loss can create serious delays in a program, along with other problems. In the production phase, the consequences in terms of inefficient procurement, increased costs, and disruption of the other service's program can be even more serious.

The Defense Science Board recommends that full-scale development be funded by a single military department. We will see to it that this is routinely considered, but we also must find other alternatives for dealing with the fact that there are few penalties for dropping out of a joint program. In any case, there can be no universally applied "cookbook" rules which rigidly define such techniques in advance -- or establish what will "always" be practical and economical.

The Planning, Programming, and Budgeting System process is DoD's primary vehicle for managing change -- most notably the shifts that come about as a result of changes in overall resource availability to the Department.

Effective management of change wrought by resource adjustments requires coordination at the overall DoD and service program levels throughout the management year. During 1983, top service and the Office of the Secretary of Defense management focused on 82 joint acquisition programs in our Fiscal Year 1985 budget submission. This means work directed toward keeping a balance between available resources, individual service priorities, and the secretary's cross-service responsibilities.

The services must first assume line responsibility for maintaining joint program stability at service top-management levels, since the secretary of each department must also achieve and maintain overall balance within each service's total program. But those issues that cannot be resolved among them are fully explored by the Defense Resources Board. This summer, we intend to institutionalize an even more focused Defense Resources Board addressal of this aspect of program stability by establishing joint program management as a distinct issue category for the program review.

Outlook

In looking ahead, let me begin with two cautions. First, common systems have common vulnerabilities. We must not let capabilities become standardized to the point where they can be neutralized by a single type countermeasure. Second, don't always count on joint programs to save money. In addition to economy, joint programs incur costs. Management manpower, the price of accommodating more than one user, the time spent on rationalizing different operational and technical requirements all use resources.

It is not possible to compute the potential dollar savings in joint programs versus such additional costs.

The real promise is in strengthening our joint capabilities and procedures. We will fight together; we must prepare together.

In that regard, it is crucial that we also prepare to fight in concert with our allies. To present a credible leadership role in our coalition initiatives, we must first demonstrate consensus at home.

This begins with getting joint programs off to the right start by using the criteria:

- Where will it make a real difference in effectiveness?
- Will the joint effort support our military doctrine?
- Is there joint agreement on the mission needs?
- Does joint program management make sense?

Although the scope of joint activities is large and growing, joint programs require exceptions to normal procedures and a great deal of flexibility. Extraordinary procedures must be considered in the areas of:

- Management for operational and technical requirements,
- Management for individual programs,
- Management for technology, and
- Management for stability.

In my view, program stability is the linchpin of successful joint-service acquisition. Our purpose in implementing all the management initiatives I have outlined is focused on developing a responsive structure capable of establishing and sustaining a modern management environment for joint programs.

There are many connecting parts to our approach. They must advance together. The extent of our success in implementing these measures will, in large part, determine the ultimate success of joint acquisition.

I am confident that we can exploit the opportunities which the future holds. We have the will and have demonstrated the teamwork to do the job.

NATO AIR BASE DEFENSE

Senator Rudman. I take that your colleagues don't have any summary statement they would wish to make.

Dr. DeLauer. No; why don't we just get to your questions.

Senator Rudman. All right.

I want to talk about a number of subjects, generally each one separate, not particularly related to each other and in no particular order.

I want to talk about the NATO air base defense to start out with, which does come into your budget.

Dr. DeLauer. All right.

Senator Rudman. Although the budget has not contained any money whatsoever, Congress has appropriated lately $250 million over the past 2 years for cooperative air base defense in NATO. We understand that none of the funding has been obligated.

Again this year, there is no request for the program, but the House Armed Service Committee has recommended another $350 million for that program.

Does DOD support the funding? And if so, why has none of it ever been budgeted?

Dr. DeLauer. I will have Jay talk to that a little further, but let me give you my personal view on the thing.

I know that it has been a solid initiative on the part of the House. I think that they recognize the need, and they have recognized the fact that they would like to see the program proceed much faster. The impact that I have had on their desires has been to have the money appropriated for Air Defense Europe.

Originally, you know, they got to where they were defining systems by Rapier, or by Roland, or by Patriots, and it is clear that this may not be the optimum solution. So they have gone along with our views that it ought to be devoted to air defense in general.

The details of this are still being hung up on the negotiation we have with the German Government with regard to who is going to share what in air base defense in Germany particularly. At the present time, we are in what I would say is the next or second from the last meeting before arriving at the final stamp of approval.

Senator Rudman. When do you think you might have those agreements.

We have heard a lot about those agreement with West Germany, England, and the other allies. So far none of them have materialized. They have taken evidently a great deal longer both between the services and between ourselves and those countries. What is a reasonable date by which we might have at least some of these agreements in final form?

Dr. **DeLauer**. I will take the easy ones first. We have the Rapier one in the United Kingdom, and that is settled. They are going to provide the capability for us in our defense of U.S. bases in the United Kingdom, so that it settled.

The one in Germany is at what I would call the 10 percent point. There is about 10 percent of the total bill, or less than 10 percent, about $60 million that is still up for discussion because of some firm pricing that came about as we nailed down the final negotiations. There is some slight misunderstanding on both sides as to the value and the intent was when we first had the discussions.

The Secretary is in Europe now, along with some people from policy who are trying to resolve the issue in regard to the extra $60 million.

PATRIOT SYSTEM COSTS

Senator **Rudman**. The cost of the Patriot system went up considerably, and that was part of the problem, wasn't it?

Dr. **DeLauer**. It went up considerably, and as a consequence the overall dollar value that the Germans thought that they had to commit was a little higher than they bid.

On the other hand, that is not the complete story. There are also some misinterpretations of what was really intended as far as the recoupments, both in R&D recoupment and others. I expect that we should settle this thing within the next month or two maximum.

Senator **Rudman**. Let's assume that you do, and that is fine. But let's assume that you don't. If you don't, then I think we have to take a hard look at all of this funding and decide whether or not we ought to assign it some place else that you have high priority for, rather than keep this money tied up for something that after a great length of time, let's assume, doesn't work.

We have to do something with the budgetary constraints that we are under, and this represents a fairly sizable piece of money.

AIR THREAT SURVIVABILITY IN EUROPE

Dr. **DeLauer**. I can't argue with you on that, but there is probably nothing that is more important than our survivability in Europe from the air threat. As a matter of fact, the next step has to be that we do more for some of those air defense systems and self-protection.

If you look at the evolving threat with the SS-21's and 23's, which I think I covered with you earlier in the year, they pose a major threat to the air defense systems per se. As a consequence, they also pose a tremendous threat to the unsheltered aircraft.

So it is broader than just buying a particular system. Personally, I would like to see some of that money being appropriated for more shelters. As you know, due to the way we allocated things, most of the shelters come out of the infrastructure, and yet it is significant that for a single $33 million F-15, for instance, we could buy 30 shelters and probably increase the survivability of that many aircraft under certain conditions by maybe a factor of 10.

UNSHELTERED AIRCRAFT IN GERMANY

Senator **RUDMAN**. The problem, of course, as you and I both know, is that there isn't much of a lobby around this town to build shelters in Germany.

Dr. **DELAUER**. No. Not only that, but I am disappointed in our agreement, when it was negotiated, that we didn't have as part of the agreement that the Germans would go ahead and build the shelters. They have more unsheltered aircraft than we do. I have been on a crusade in this, as you know, and I am still going after it.

On the other hand, I wish we could loosen up the language a little bit in the bill with regard to the application of the moneys as you talked about. I think we could get much more air defense protection of our airfields and our aircraft, and the POL and munitions, if you gave us some flexibility in how we could use the money.

Senator **RUDMAN**. Why don't you provide such an informal proposal for the record. I have, as you know, visited most of those bases, and I was struck by the fact that they are extraordinarily vulnerable.

There is no question but that simply furnishing the money in the form that we presently are talking about does not do what we really ought to be doing. In fact, I would agree that it is probable, even if all completed that, it would not do what it is supposed to do. It is just not enough.

Dr. **DELAUER**. That is right.

Senator **RUDMAN**. So I would like that proposal for the record.

Dr. **DELAUER**. We will give that to you.

CHEMICAL WEAPONS

Senator **RUDMAN**. Let's turn now to another subject. Let's turn to chemical weapons.

Dr. **DELAUER**. All right.

Senator **RUDMAN**. For chemical weapons production, the request is for $95 million to procure shell and bomb casings for preproduction work on the chemical agents.

Can you tell us if the program has changed in any way since Congress refused to fund chemical weapons production last year?

Dr. **DELAUER**. The R&D money now being spent is primarily on the Big Eye, which is the Navy managed program, which will be used for all services. It is an air delivered munition, which is being developed for the binary chemical agents. We are proceeding with that program. There have been some slight program difficulties that are well taken care of now. In addition, there have been major arms control initiatives during the past year. Finally, this year we are requesting only funds to prepare to produce, not actual production.

Senator **RUDMAN**. Are there flight safety problems associated with the Big Eye? Have there been tests that have addressed that?

Mr. CANN. The original test concerns had to do with somes pressure problems, and so forth and those have all been corrected. The only remaining activity that is to be tested has nothing to do with the introduction of the weapon. It has to do with getting and mixing the chemicals a little bit more efficiently.

At the present time, we are in a position where we plan to be able to have completed the first phase of operational testing by the middle of fiscal year 1985. So we intend to procure all lead and the metal parts in 1985. At the present time, we think that the program is in good shape.

Senator RUDMAN. There is about $50 million in here for bomb and shell casings, as I recall the figure here. Could there be a conversion to conventional use if for some reason the Congress decides not to allow the development?

Mr. CANN. I don't believe so.

Senator RUDMAN. There would be none?

Dr. DELAUER. I think they are strictly for chemical use.

Mr. CANN. They are unique.

Dr. DELAUER. You are right. I have been looking at places like filling stations where once we got the Big Eye, I could go and get them filled up. There are other people who make the contents of that thing. It still may be an option for us.

We can't seem to get people serious enough about the need for the dual approach, and, as a consequence, we have the problem of storing the unitaries and the binaries that we really do have to get at. I hope that we can get over that hurdle this year or at least next year anyway.

Senator RUDMAN. That is a very contentious issue, I don't have to tell you that, and that is why we look at these numbers and we wonder, with the money being spent. Let's just hypothetically assume that you are absolutely right, I happen to agree with you, of course, and I voted that way.

Dr. DELAUER. I think that it is our responsibility to keep proposing to you and keep insisting that these things are absolutely required. We hope that reason will prevail at some date.

AMRAAM, MISSILE SYSTEM

Senator RUDMAN. Let's move on to AMRAAM. The Department's original request of $431 million to initiate procurement of 174 AMRAAM missiles in 1985 is being cut to $109 million and correspondingly to 20 missiles.

I guess I have two questions. Why the change, and what R&D problems are being encountered, to the extent that you can talk about it.

Dr. DELAUER. I think that the numbers you stated were true. The Secretary in his amended budget reduced the AMRAAM line item himself, particularly on the procurement side. The problem we have with all of our missiles—I got back late last night after talking to the Tactical Missile Symposium at Eglin Air Force Base last night at dinner, and I jumped all over the audience, which are all either service side or the industry side, on building tactical missiles, of which AMRAAM is the biggest one, and Eglin is the general manager of the program—is the fact that we have done such a terrible job on the transition from RDT&E to production.

I keep offering up to the Congress that if they wanted to jump all over us, they should jump all over us on that subject instead of the one that they jump on, which is testing, warranties, and other things. The real money is saved if we could transition into manufacturing in a better way, and we have taken some positive steps to do that. But that is the biggest problem we have had in all of our missiles over the last couple of years.

Two years ago when I was over here talking to you on the same thing, but instead of AMRAAM, you talked about I-SQUARED R-MAVERICK. That was the same problem: getting it into production. We are having that same problem with this program.

Senator RUDMAN. It is about 3 to 6 months behind schedule.

Dr. DELAUER. That is right.

Senator RUDMAN. And $850 million over ceiling. Is it safe to assume that all remaining development costs will be covered under that contract? If not, how much more is going to be needed?

Dr. DELAUER. I think the development costs are covered.

Mr. CHEN. Mr. Chairman, may I answer that?

Senator RUDMAN. Of course.

Mr. CHEN. The full-scale engineering development program is a fixed price contract, so there will be no cost increase to that part of the program.

You mentioned that there might be some development problem, I want to make sure that you undestand that right now we are kind of at mid-point in the development program. We don't see any real development problems. The reason why we took the cut is because the program was originally structured so that we had to make some production decisions very early in the program. As a result of the 6-month slip that you referred to we were not able to, make that production decision because we had not crossed all of the milestones that we wanted.

I just want to correct that impression. I don't think that the development program is in trouble in any way. I think we are in a delayed mode. But I think what we have now is a situation where we are looking at what we do, as Dr. DeLauer said, about productibility. We are talking with the contractors right now in terms of production options, when we can exercise them, et cetera. I think that the thing that you saw in terms of the cut is not because of any problems in the development.

Senator RUDMAN. It wasn't just the cut, Mr. Chen. I had a staff member go down to Eglin to look at that for me, and report back. From what I saw in his report, I was generally not terribly satisfied with the management of that program by the people down there, both from a cost point of view and otherwise. Are you satisfied with the way that has been managed?

Mr. CHEN. This is, to say the least, a very challenging job.

Dr. DELAUER. The short answer is no.

Senator RUDMAN. I was kind of hoping so.

Dr. DELAUER. And the Air Force knows it.

Mr. CHEN. We are looking at the problems. There is no question that we have some problems. As I said before, we are trying to deal with a very, very difficult problem in a very short time, and we have a lot of things that are left to do.

Dr. **DeLauer**. I will tell you what we are trying to do to help him. They love our help in OSD.

Senator **Rudman**. You see, if you adopt my plan, which I am going to try out in the next year or so, then we won't have all of these various people involved. We are going to have one group involved doing all of that. You and I have talked about that.

Dr. **DeLauer**. Yes; we have talked about that before.

Senator **Rudman**. I have it almost finally worked out.

Dr. **DeLauer**. Let me help you sell it.

The program was part of the decentralization of the services that the Secretary wanted to encourage when he came into office, and we reviewed a lot of programs. In a few programs, we said, "Look, you the service, these look like they are in reasonably good hands. Your interest is high," and so forth. As a consequence, the AMRAAM Progam was so decided.

I have dragged back, and now it has become a DSARC Program, and they are in the process of coming back with a restructured program which we will review within the next month or two.

AMRAAM PROGRAM EXISTENCE

Senator **Rudman**. Let me ask a specific question about that program. How long has that program been in existence? When did it start?

Mr. **Chen**. We are about in the 29th month of a 50-month program.

Senator **Rudman**. The 29th month of a 50-month program.

Mr. **Chen**. Right.

Senator **Rudman**. In other words, 29 months ago it started.

Mr. **Chen**. This current phase, the development phase, the full-scale engineering development phase.

Senator **Rudman**. Was there anything before that?

Mr. **Chen**. We had a demonstration phase before that.

Senator **Rudman**. How long did that last?

Mr. **Chen**. I think that it was a couple of years.

Dr. **DeLauer**. Two years.

Senator **Rudman**. So you had 2 years, and 29 months, you said, so you have had 4 years, or a little bit more than 4 years that it has been running.

Mr. **Chen**. Yes.

Senator **Rudman**. How many program managers have there been at the project during that 4-year period?

Mr. **Chen**. Since the beginning of the program, in November 1976, there have been four program managers.

Senator **Rudman**. That is the problem. If private industry tried to run a project of that magnitude with four managers during a 4-year period, the chairman of the board would probably get fired, the stock would probably go down, and hell would be raised.

I am not being critical of you, Mr. Chen, I am just being critical of the system. I have asked that question over and over again to all of the services, and this is precisely what I hear. Let me just follow up a bit because I think that this is very instructive.

Are you personally acquainted with these four program managers, generally?

Mr. CHEN. Yes, I am.

Senator RUDMAN. Could you tell me, the first program manager, what did he do or she do prior to becoming program manager of this program?

Mr. CHEN. We usually pick for a program of this size a fairly senior person who has had acquisition experience. I cannot tell you right now exactly what his background was, but I am sure he had a background in acquisition.

Senator RUDMAN. Immediately prior to that assignment?

Mr. CHEN. Yes.

Senator RUDMAN. I would like, for the record, to have the career assignment record of those four program managers of this program prior to their being assigned to being program manager of AMRAAM.

Unfortunately, what I have seen in some of the other services is, while maybe not in this case, people coming from a combat command, managing a highly complex program in a very intensive business-oriented environment for a year, 18 months, or 2 years, and doing a reasonable job, or a not so reasonable job.

Then at the end of that period, moving back into another combat command because obviously that is where you get all of that stuff you wear up here. You don't get much of that managing successful programs, at least not yet, although I hope we are heading toward that. So everybody wants to go out and get a combat command, and get into a leadership position, command a squadron, a wing, or whatever.

So I would like to see the career track of these four people, because I am building some statistical data for a proposal that I intend to make to this Congress some time in the next 2 years for a major reform in this procurement process, which I think is sorely overdue, and it is going to be forced upon us by the incredible budgetary crunches that are going to be coming down over the next 2 years, which are incredible compared to anything we have seen to date. I just would like that for the record.

I am not being critical of you, or your service. I think that it is a servicewide problem, and until it is addressed by everyone involved, it is not going to get any better. It is no wonder to me. I am surprised you are not a greater number of months behind, and a greater number of dollars over, with four program managers in 4 years in a program that you say yourself is extremely complex, very difficult, and that you are being pushed to get done in a relatively short period of time.

Mr. CHEN. I would say, in that regard, though, I can't speak for the other two services, but as far as the Air Force is concerned, I think that by and large we do have a system where we bring people into the acquisition field with a background in acquisition. It is true that they also go out to command assignments.

Senator RUDMAN. They ought to stay there longer.

Mr. CHEN. I couldn't agree with you more.

Senator RUDMAN. I have run businesses in my life, probably more than many of the people who manage these programs. I wouldn't want to go in and manage a program for 1 year, and then be assigned to something else. It takes you 6 months to find out where the men's room is, to be perfectly frank about it.

I think that it is a real problem. It is very disturbing. We are nibbling at the edges, and we are having a grand debate in the Congress about how much is enough in the defense budget, and we are not addressing the systemic problems that really exist that could make this thing better, and that is very discouraging. At any rate, I guess I am preaching to the chair.

Dr. **DeLauer**. Absolutely.

Senator **Rudman**. So we will move on from there.

Dr. **DeLauer**. In your interest, you ought to carry that down below the program manager. You have to have an established infrastructure. You have to have an infrastructure within the acquiring organization that has experience, interest, and long-term career ambition. Many of those are not active duty military people, but are a part of the civilian population.

Senator **Rudman**. You will find my proposal very interesting. I hope to have it published sometime in the next 3 months. I have been working on it for about 2 years.

Dr. **DeLauer**. Good.

[The information on program managers follows:]

PROGRAM MANAGERS

In order to present the complete picture of the program manager history of the AMRAAM program, it is necessary to begin with Concept Validation when the System Program Office (SPO) was formed and the first AMRAAM program manager was assigned. This occurred in November 1976 when the AMRAAM Joint SPO was formed at Eglin AFB, Florida, to initiate development of a follow-on air-to-air missile to replace the AIM-7 Sparrow.

Col Luke Boykin was well qualified to become the first AMRAAM program manager. At the time he was selected as the program manager, he had served 23 years, 14 of which were spent in system acquisition jobs, the remainder in operations and formal education. Col Boykin guided the AMRAAM program for almost four years through Concept Validation and Milestone I of the Defense System Acquisition Review Council (DSARC) process. (This was consistent with our desire to keep PMs through major acquisition milestones.) His immediate job prior to his AMRAAM assignment was Special Assistant to the Commander of the Air Force Systems Command for Joint Service Activities--the group that developed the AMRAAM joint operational requirement. Prior to this he was the AIM-7F Deputy Program Manager. Col Boykin retired in April 1980.

Col Gerald Schwankl succeeded Col Boykin as the second AMRAAM program manager in June 1980. Col Schwankl also possessed a wealth of program management and operational experience, having served 10 years in system acquisition jobs during his 25-year career prior to his assignment as the AMRAAM program manager. His immediate job prior to his AMRAAM assignment was Deputy for Engineering, Aeronautical Systems Division, Wright-Patterson AFB, Ohio. He also held key acquisition jobs on the B-1, Minuteman II and Peacekeeper programs. Col Schwankl was promoted to Brigadier General and was reassigned in April 1982 to be Deputy Commander for Development and Acquisition, Armament Division, Eglin AFB, Florida, where he contiued to be deeply involved in AMRAAM's development, as well as other critical Air Force programs.

Col Henry B. Fisher became the third AMRAAM program manager in May 1982. Col Fisher's 22-year Air Force career included 14 years in systems acqusition jobs, the remainder in operations and education. His immediate job prior to the AMRAAM assignment was as the Assistant Deputy Program Manager for Airborne Warning and Control Systems (AWACS) at Hanscom AFB, Mass. He was reassigned in April 1983 to be the Assistant Deputy Commander, Eastern Space and Missile Center, Patrick AFB, Florida.

The fourth and current AMRAAM program manager is Col Leon Redenbacher. Col Redenbacher brought over 26 years of operational and program management experience to AMRAAM, including two previous program manager positions--A-10 and Air Force Simulators. Col Redenbacher has elected to retire in August 1984 and will be replaced by Col Thomas Ferguson, the current Program Manager on I^2R Maverick at Aeronautical Systems Division.

The career track of these four individuals demonstrates the quality and experience backgrounds that we expect when we select a program manager. Generally speaking, our program managers are well-educated and have a balance of system acquisiton and operational experience. As important as the program manager is to the success of a program, of equal importance is the team of civilian and military professionals that support him. The AMRAAM program has been characterized by stability of its key program team members as show below:

POSITION	TENURE (MONTHS)
Deputy Program Manager (USN)	38
Deputy Program Manager (AF)	36
Director of Projects	58
Director Program Control	23
Director Test	31
Director Logistics	36
*Director Engineering	11
Director Contracts	82
Director Manufacturing	41

*Previous incumbent was onboard 79 months.

LAW AND SMAW PROGRAMS

Senator **Rudman**. Let's move on from AMRAAM to the LAW and the Marines' SMAW. What has the Army done to examine the feasibility of using that particular weapon as its light antitank weapon, the Marine Corps weapon?

Mr. **Sculley**. As you are aware, Senator Rudman, last year the Army, as the executive service, conducted an evaluation of light antitank weapons, and evaluation that included oversight by the Office of the Secretary of Defense, and literal participation by the Government Accounting Office in the test and evaluation scheme.

It was a test that served both the Army and the Marine Corps. The services had slightly different requirements for the weapons. The Marine Corps is willing to pay a slightly higher weight penalty, if you will, than the Army.

Senator **Rudman**. Sixteen pounds, I believe was their weight.

Mr. **Sculley**. Yes, sir.

Senator **Rudman**. The Army is still down around 11 pounds?

Mr. **Sculley**. Even less is desirable, but we did evaluate weapons up to and including 20 pounds, and then even some in excess of that in the medium range category. In that evaluation, the Swedish AT-4 was judged to be the overall winner, taking into account performance, firm fixed price offer, et cetera.

We have moved recently to acquire 1,000 of the AT-4 rounds for substantial testing and evaluation that the 70 rounds did not permit. In the Army, we have not made a final decision whether to use the existing LAW or to accept the weight penalty of the AT-4 at, I must say, an attractive price of $715.

ARMY AND MARINE CORPS WEAPON REQUIREMENTS

Senator **Rudman**. The Marine Corps, obviously, has decided that what they need is the bunker buster, or a light armor buster. They want that because of the role of their mission. The Army infantry mission is very similar, of course, but the Army still continues to try to push technology to get a light armor weapon that would be lightweight and still kill heavy armor. The Marine Corps has pretty much decided that if it has to kill heavy armor, it is going to do it another way. I just wonder how long it is going to take the Army to come to that same conclusion, maybe it already has.

Mr. **Sculley**. The physics really don't allow a truly lightweight, lightweight by the Army's definition, weapon to attack frontally enemy armor and defeat it.

Senator **Rudman**. That is exactly right.

Mr. **Sculley**. In this process, I think we have finally realized that the highly proliferable weapon we need would take on BMP, and similar vehicles, and I think that it would be highly effective. We agreed that we would have to use other weapons in our inventory, the existing Dragon, or Tow, Hellfire or Copperhead, or direct fire from tanks to defeat the Soviet armor.

Senator **Rudman**. The SMAW, of course, is based on the Israeli B-300. There has been conversation about developing an antiarmor warhead for that weapon. Again, I have to tell you that as we sit up here looking at all of these budgets—I address this to Dr. DeLauer, as well as to you—it just seems to us, and most of my colleagues who have been involved in this whole Viper fight that I was in over a couple or 3 years, that the mission of Army infantry and Marine Corps infantry, in terms of needing armor in the battlefield, is not that different.

If there was ever a need to save some money by consolidating on one weapon for both infantry units, the Army and Marine units, if there ought to be a program, this ought to be it. I would hope that by some time, we see more cooperation because I think the Army pretty much has come to the conclusion that under the laws of physics presently as they are applied, and the technology that we know, you are not going to get what you hope to get. So maybe what you ought to do is to have one good progam, with a follow-on of an antiarmor warhead.

As far as the Army having 14 pounds as opposed to 16 pounds, I am probably prejudiced having been an airborne infantryman myself, but I think Army troops can carry as much weight as Marine Corps troops can.

I also think that Army troops would be very happy to carry as much as they have to carry reasonably if they thought it would work. It is very intimidating to infantry to face armor. It is very intimidating indeed. I just think that we ought to get on with this, and stop dickering, and pick a weapon that works, and save some money in the meantime.

I might point out to you that the cancellation of the Viper, from the information I have, is probably going to save something in the area of $800 million to $1.2 billion. That is what we save by that, and we had a terrible fight, yet everybody now agrees that it was the right thing to do.

I really think that we ought to get on with cooperating on this light antiarmor weapon particularly because we are under such budgetary constraints. There is no earthly reason why the two services ought to have different weapons for this application.

Mr. **Sculley**. In fact, in the light antitank weapon evaluation, both the Source Selection Advisory Councils from the Marine Corps and the Army had some members that were common to both. We, in fact, are working very closely with the Marine Corps.

Senator **Rudman**. I hope that you continue to do that. I think that it is very important.

I want to talk about the Tomahawk, if we can, for a while. But we will first recess for a minute or two here.

[Recess.]

TOMAHAWK MISSILE SYSTEM

Senator **Rudman**. Let's go to the Tomahawk. The Department is seeking $580 million for 120 Air Force GLCM's and $589 million for Navy Tomahawks—75 antiship, 75 nuclear land attack, and 30 conventional land attack missiles. The antiship missiles comprise only 13 percent of the program. Is that enough? Is that the right mix? Are you satisfied with that?

Dr. **DeLauer**. I am not completely satisfied with the progress that we had in the past, but I am sure than satisfied with the recovery that the Tomahawk program has made from a producibility and performance standpoint.

We have had good performance in the last 6 months, both out of the production of the missiles, as well as our flight testing. I think that what we have asked for in the revised budget has some difficulties with it, particularly when we look at the level that we are asking for in the next couple of years. One is whether or not a dual source program is the most cost effective thing to do, particularly on the integration. But that is something that the Navy has been working on. They do owe me a response on that.

On the other hand, they are convinced I think, that to have the integration a dual source activity is the right thing to do. As a consequence, they have increased in their budget the number of missiles that are going to be bought in the next years.

Senator **Rudman**. Let me ask a question on that point. There was a problem with the 1984 procurement because, I guess, the tech package was not ready.

Dr. **DeLauer**. That is right.

STATUS OF DATA PACKAGE

Senator **Rudman**. And the data package was not ready yet and so forth. Has that now been taken care of?

Dr. **DeLauer**. I think that in 1984, Congress zeroed the survivability program on Tomahawk, and we have had the same action by the House in the 1985 budget. I think that we would like to be sure that that survivability program is funded in 1985.

Isn't that right, Jerry?

Mr. **Cann**. That is right. Also, we have a lot of difficulties with the program, in line with your comments about the program managers, so we are very sensitive to that issue. I am in no way going to sit here and argue the same issue you have for some time, but in the last 2 or 3 years we have taken some very strong actions to make assignments for 4 years for program managers.

Senator **Rudman**. For the Navy procurements.

Mr. **Cann**. Yes.

Senator **Rudman**. I would say that the Navy has done a superior job as compared to the other services in terms of stability in program management. I think that it has shown in some of the programs.

Mr. **Cann**. In fact the Tomahawk issue, about 2 years ago, or 1½ years ago, we brought Admiral Hodstetler into the program to run a major program review. As a matter of fact, we essentially stopped the program briefly while we took a look at all aspects of not only the weapon, which was being developed independently, but also looking at the integration of the weapon, the various ships, and so forth, that it was going into. We agreed that we were not in the position we thought we were in, and ramped down the production until we got all of the pieces of the program put back together again.

We now have that program in place, and we are confident, based on the production reviews that have been held, and the data packages that are coming forth, that we are now in a position to get the production ramped backup. We are under a constraint from Congress for T-LAMPS-SEA that we can't procure it until after the

OPEVAL is completed, which will be sometime in the middle of 1985.

Senator **Rudman**. There was a problem with the transfer from General Dynamics to McDonnell of the technical data package in 1984. Has that now been transferred, is that now complete?

Mr. **Cann**. My understanding is, yes.

Senator **Rudman**. Would you answer that more completely for the record just to be sure that we have it accurately?

Mr. **Cann**. Sure.

[The information follows:]

TOMAHAWK

During the past 18 months General Dynamics/Convair [GD/C] and McDonnell Douglas Astronautics Company [MDAC] have been transferring technology to establish two production facilities of Tomahawk All-Up-Rounds [AUR's]. The initial plan was to be in a position to fully compete for the total Tomahawk FY84 buy of 244 Air Force Ground Launched and Navy Sea Launched Cruise Missiles. Government production reviews at both GD/C and MDAC in late 1983 indicated that both contractors were making steady progress. Both companies were transferring technical data and "know how", but due to the learning process and manufacturing start up problems there were key processes and procedures that had not been demonstrated to justify a sound technical basis for awarding the entire FY84 buy. Therefore, the Joint Cruise Missiles Project Program Manager decided not to compete the 244 FY84 missiles, but instead established FY84 as a production transition year. In FY84 36 AUR's are being built by each contractor to reduce technical risk and ensure appropriate transition to full competition for FY85. The primary transfer of technology will be complete by the end of calendar year 1984 and both contractors will have built and completed production qualification testing of guidance systems and missiles. All drawings, major tools, numerical control tapes, fabrication processes and other key data have been transferred. GD/C has built up and tested a complete guidance set. MDAC is on schedule with missile fabrication. Current plans show that each manufacturer will demonstrate the organic capability required to fully fabricate complete missiles by October 1984 and it is the intention of the Navy to award a dual source competitive procurement in FY85.

Dr. **DeLauer**. That is the dual source I was talking about.

Senator **Rudman**. Yes.

The production of the conventional land attack missile was delayed to develop a new warhead and improved terminal guidance. Because of the guidance problems, the committee insisted, as you may recall, on complete operational testing before any conventional missiles entered production. Do you think that is a fair precondition again for this year?

Dr. **DeLauer**. I think so. We have accepted the fact that we have got to finish that OPEVAL for TLAM/C; why don't we just continue, if we have the program laid out that way. I have no problem with that.

NAVY JET TRAINING SYSTEMS

Senator **Rudman**. Let me move to the Navy jet training systems. Can we move on to that now?

Dr. **DeLauer**. You sure can.

Senator **Rudman**. Do you want to say something else on Tomahawk?

Dr. **DeLauer**. No. I was looking for the Navy training airplane, and I haven't got it. It wasn't a joint program, so consequently I didn't bring it. But go ahead, then we can answer for the record.

Senator **Rudman**. Somebody can answer it, or you can answer for the record. We have a couple of questions on it. You identified the requirement for the trainer and the simulator in the "Mission Element Need Statement" issued in 1979. I just want to go through some of the history here.

You required ICC to replace the T-2 and the TA-4, which was to be in 1986, and the Hawk was selected in September of 1981. There is still no development contract, and the IOC is now projected to be in 1991. The procurement is planned to stretch into the late 1990's. The T-2 and the TA-4 are going to require modernization to last until these new trainers are delivered.

The Air Force needs to replace their T-38's in the last 1990's. A single aircraft development, it seems, could be initiated in this year; I don't know whether it ought to be or not. It would eliminate some of the duplication that we are obviously going to have in the high cost of that developing aircraft, one of the highest costs we have in this entire budget.

The Navy has obviously had difficulty with their justification, results, and later than desired IOC for the Hawk. The commitments are very high from the administration to the British, and that is one of the reasons, obviously, and I understand that.

The Air Force has embarked on a $3.5 billion program to replace the T-37 with T-46 for primary training. The Navy uses the T-34 for such training and the pilot plane is available. Over $2.5 billion could be saved by procuring the T-34.

This is just a little bit of the history. I guess I have five questions. Does anybody disagree with the history?

Dr. **DeLauer**. No; you are absolutely right.

REPLACEMENT OF T-38 AIRCRAFT

Senator **Rudman**. This is a question for the Air Force, and for Dr. DeLauer. When does the Air Force need to receive initial aircraft to replace the T-38 in the advanced training role?

If you want to answer these for the record, you may. Would you prefer to?

Dr. **DeLauer**. We will.

Senator **Rudman**. I will give you the five or six questions, and then if you want to answer for the record or otherwise.

Can the T-2 or the TA-4, with modernization, last until replaced by the new Joint Service plane?

Why can't the Navy and the Air Force use the same primary in advanced trainer?

If the Navy needed new trainers in 1986, but now needs them in 1991, why buy such an old design and add weight to make them carrier suitable?

I will give you a copy of these in writing.

Dr. **DeLauer**. Yes, if you would do that.

BRITISH PURCHASE OF HAWK MISSILE

Senator **Rudman**. Five. What is the nature of the rationale for our commitment to the British to buy the Hawk? What portion of the $5.5 billion in VTX will actually go to the United Kingdom.

Finally, if a joint procurement of the T-34's and a new joint service trainer can save over $6 billion wouldn't it be better to use that money to buy additional aircraft to modernize the Navy and the Air Force combat wings?

Those are my questions on this whole subject. I think that it is a very important subject.

Dr. DELAUER. This is the first issue I faced when I came into this job. As you point out in the historical aspects of it, the argument was the timing. The Navy needed one now, the Air Force didn't need one until later. The Air Force needed a primary at that time, and the Navy had plenty left. We had two different programs.

We went back and forth, particularly with the Senate. Senator Goldwater was very much involved in the rationale of why we did all of this. As you point out in the historical recap, this tremendous 8- or 9-year gap in need is slowly shrinking so that the requirements are starting to overlap each other. I think it is reasonable for you to ask us to reexamine that.

Senator RUDMAN. You bring people in from the colleges, and you put them into primary training, they have to learn to fly. If you start out learning to fly, as many of us who fly know, it doesn't make much difference where you are going to end up, whether B-52's or F-18's, or KC-135's, the primary training is primary training to learn how to fly. We have an awful lot of duplication here.

Dr. DELAUER. You were there. You know the argument as to whether they should be side-by-side or in tandem. That is a philosophical argument. It has nothing to do with whether somebody gets trained or not.

Senator RUDMAN. I hope that we can get some answers, because I am going to predict that there is going to be some action in this area, and I think we ought to be prepared to come up with the best possible solution.

I have been informed by our cloakroom that we are able to continue this hearing, if I wish to, and I wish to, rather than going over to the House. I would like to hear the President of Mexico, but I think that this is much more important. So we are going to continue and finish this.

Dr. DELAUER. We are prepared.

HARM MISSILE SYSTEM

Senator RUDMAN. Let's move on to HARM.

Dr. DELAUER. Now you are in my territory.

Senator RUDMAN. Last year, the committee very reluctantly agreed to forego second sourcing HARM, which you supported, in favor of concentrating on the development of a low cost Seeker for the antiradiation missile. Now the Navy wants to reprogram $30 million away from the Seeker and use it for increasing production of the missile.

Can you tell us what is going on with this program?

Dr. DELAUER. There are two pieces of that.

Senator RUDMAN. All right.

Dr. DELAUER. As you know, as part of the conference, the Congress knocked out the $30 million for production improvements in the existing program. That was House action, and the Senate receded to them during the conference. So we still would like to have the money to do the right kinds of ECP's on the present program. I would like to get that out of the way, and we would like to have that. We think that it is necessary.

There is no question that a second source was the most cost-effective solution. Facing us in the HARM Program, or in the antiradiation missile, was the cost of the article itself. At the time that these discussions were going on, I felt that one way to drive the cost down was to have a second source. But if you examine in detail the structure of the HARM Program, you found that much of the cost was in purchased parts, and that the design of the Seeker itself in manufacturing wasn't going to be reduced very much by having a second source. There just wasn't much to take out.

It was a design that was based on previous technology, and it didn't look like there was much. I kept pushing that, and I was able to convince Paul Thayer that it was the case. He sent a letter over here saying that we were going to go after a low-cost alternative. The low-cost alternative was to be based on the advanced work being done by China Lake on the program.

In trying to structure that program, it became clear that we had different veiwpoints on how that program should be pursued at China Lake. I would say that there were three concepts that were being pursued. There was one which was pretty much supported by the Navy Secretariat that wanted industry to propose, and wanted China Lake to evaluate, technically monitor, and get on only with a design, and no commitment to production.

There was a group composed of people in my organization and supported by some staff members in the House that essentially wanted to put China Lake in the manufacturing business, and that didn't sell with me worth a darn. To settle this thing out, 2 weeks ago I took the two staffers out of the House, we got on an airplane, leaving everybody else home, and spent a day and a half at China Lake.

They finally got the message, and they presented a program that I think we all can live with. It is one that is based on their design. They will complete the design in something like 8 to 10 months. They will put out an RFP in a shorter period of time than that to two competitors or more, to come in and review the data package. They will focus on putting that data package into production.

Let me assert that notwithstanding a lot of conversation you might hear, the Center of Anti-Radiation Technology resides in just two places in the United States, partly in Texas Instruments and at China Lake. So we have the right people in the game.

Some other people will tell you that we have a lot of great ideas, and everything else. But if you go out and, in detail, examine the hardware, examine the testing, see what the history of the patents is, and discover who has made the advancements, you will find that indeed China Lake has done that. Not only that, but the program that we are advocating now for the second source low-cost Seeker is one that has the modus operandi of the successful China Lake programs.

Where they provide a data package, the contractors do the manufacturing based on revising them such that they can produce them, China Lake is the technical and program conscience of the program throughout its lifetime. I have sent the letter to the services recommending that action, and I expect that it is the way that it will go.

Senator **Rudman**. All right.

Dr. **DeLauer**. Also, we will probably come in for some money for that, too.

Senator **Rudman**. Could we have a copy of your letter for the record?

Dr. **DeLauer**. Yes; we will put it in the record

[The letter follows:]

THE UNDER SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

RESEARCH AND
ENGINEERING

14 MAY 1984

MEMORANDUM FOR THE ASSISTANT SECRETARY OF THE AIR FORCE
(RESEARCH, DEVELOPMENT AND LOGISTICS)

SUBJECT: HARM Low Cost Seeker

By the attached memorandum I have asked the Assistant Secretary of the Navy (Research, Engineering and Systems) to alter the development program for the HARM Low Cost Seeker. The change I have requested is based on the development approach briefed to me on 3 May 1984 by Naval Weapon Center personnel. Your Deputy Assistant Secretary for Systems was present at the briefing.

As I note in my memorandum to ASN/RES the development approach presented to me on 3 May is both effective and compliant with Congressional guidance. I believe it is in the best interest of the Air Force to support this change. I therefore ask that you provide me with your concurrence to the development plan accompanying the attached memorandum. Please respond by 16 May 1984.

THE UNDER SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

RESEARCH AND
ENGINEERING

14 MAY 1984

MEMORANDUM FOR ASSISTANT SECRETARY OF THE NAVY
(RESEARCH, ENGINEERING & SYSTEMS)

SUBJECT: HARM Low Cost Seeker

As you know, I recently conducted a full on-site review at the China Lake Naval Weapons Center of the alternate seeker program for HARM. I was accompanied by members of my staff who know the program history, and who are fully conversant with the positions and arguments of all parties. NWC personnel gave a thorough review of present status, displayed and discussed existing items of hardware, and discussed at length the program plan they are now pursuing. At my specific request, they also presented an alternate development plan that would follow the development approach employed by NWC on SIDEWINDER and other successful missile programs.

Based on all that has gone on before, and what I saw and heard at NWC, I have concluded that the current program plan must be altered. It is clear that better application of resources, both industry and government, can be obtained under the alternate NWC plan briefed to me on 3 May 1984. The plan of 3 May utilizes the technical talent at NWC, yet it takes full advantage of industrial expertise in designing for reliability and producibility. Further, it is also clear that the current plan will not be acceptable to the Congress, and that acceptance will be obtained only by modifying the current approach.

In consonance with the above and our 11 May discussion of the subject please issue instructions to proceed with the NWC plan of 3 May. The approach is to include these features:

1. NWC is to remain responsible for program management and technical direction.
2. NWC is to be the design agent.
3. NWC is to let all contracts which may be required.
4. Two contractors are to be selected to do packaging and producibility of the NWC design, for subsequent transition into production.
5. NWC is to assign and control contractor efforts through the issuance of task orders.
6. NAVAIR will provide full HARM support for orderly integration of the Seeker into HARM.

Time is of the essence. If we continue to make false starts, DoD will lose an ideal opportunity to improve the industrial base. Additionally, the transmittal of an unacceptable plan to Congress will cause further loss of support for the basic HARM program, as evidenced by the recent report of the House Committee on Armed Services. As you know, eight weeks have elapsed since we notified Chairmen Price and Addabbo that a plan would be submitted in the near future. Accordingly, in the interest of sending Congress a plan quickly, I have attached for your consideration a proposed revision of the development plan you sent to me. As revised, I believe that the plan is consistent with the NWC program plan briefed to me on 3 May 1984. I therefore ask you to agree to its release to Congress. Please respond no later than 16 May 1984.

Rich

JOINT NAVY/AIR FORCE HARM LCS PROGRAM PLAN

The following acquisition strategy is planned to accomplish the HARM LCS development effort:

(a) As presented in enclosure (1), a request for proposal (RFP) will be issued in September 1984 to initiate Phase 1 of a two-phase engineering development program. Two contracts will be awarded. Each contractor will fabricate six engineering models of the low cost seeker assembly (antenna and receiver) for the ten-inch fixed body HARM application. These engineering models will be based on circuits and in some cases supplementary breadboards that have been designed by the NWC. It will be the responsibility of each contractor to translate the design into a producible and reliable seeker assembly. This work will be accomplished with NWC retaining configuration control of the design.

(b) At the completion of this eighteen-month effort the contractors' designs will be evaluated for performance, producibility, reliability and supportability.

(c) The Critical Design Review (CDR) during the fourth quarter of FY 87 will result in the selection of the packaging concept that will be refined in Phase 2 of engineering development. Following the completion of the CDR and prior to a Government commitment to proceed into Phase 2, a program review will be held to evaluate the state of the program.

The Navy and Air Force will also, via the above joint effort and separately through solicitation to industry, begin to immediately investigate all promising ARM seeker technologies including the designs discussed in the preceding section which could satisfy joint service requirements for smaller diameter, lower cost ARM systems. This joint effort will allow an appropriate decision to be made in FY 1986 regarding (1) the desirability of developing a smaller diameter, lower cost ARM, and (2) the technical approach to be pursued.

The Naval Weapons Center (NAVWPNCEN), China Lake will manage the LCS program and let the contracts for the acquisition plan described above. Specifically NAVWPNCEN will: develop the low cost seeker in-house; contract with industry for fabrication of engineering models and the introduction of design changes necessary for producibility and reliability; chair the source selection evaluation board and be the source selection authority for contractor support; and test and evaluate the low cost seeker.

This proposed strategy complies with the intent and objectives of Congress to:

(a) reduce the production cost of HARM by continued pressure on Texas Instruments:

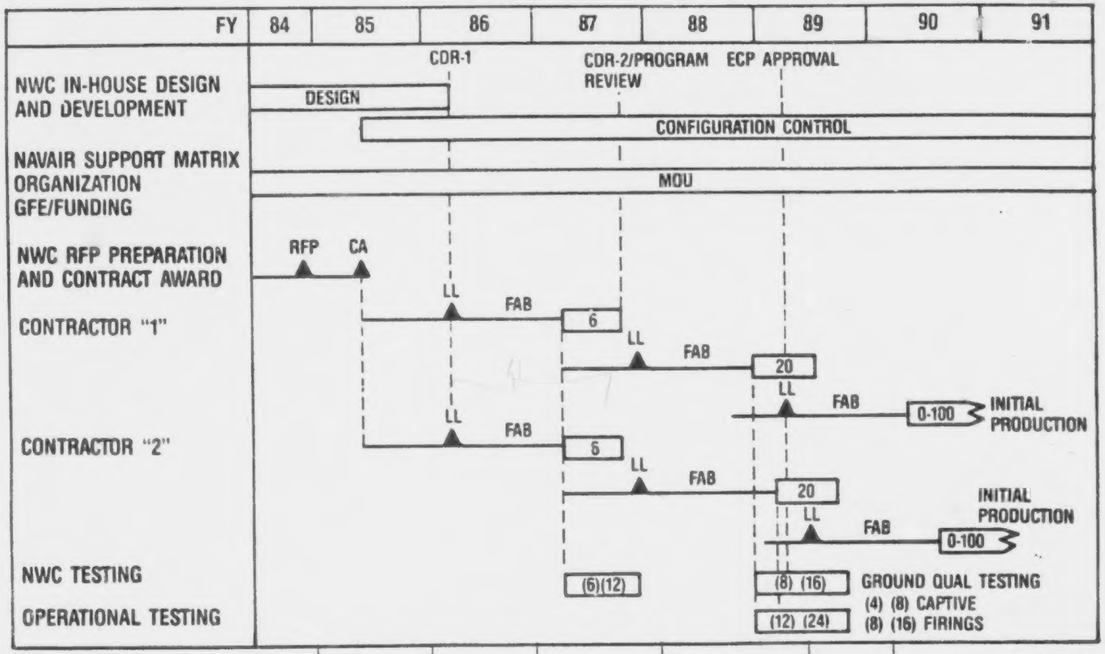
(b) potentially further reduce the cost of HARM by integrating all or parts of a lower cost seeker:

(c) expand the industrial base for HARM and future ARM development/production:

(d) ensure the rapid maturity and transfer of LCS/ARP technology to industry under the technical management of the Naval Weapons Center.

LCS PROGRAM STRUCTURE

1 MAR 84


FY
84
85
86
87
88
89
90
91
NWC IN-HOUSE DESIGN AND DEVELOPMENT
NAVAIR SUPPORT MATRIX ORGANIZATION GFE/FUNDING
NWC RFP PREPARATION AND CONTRACT AWARD
CONTRACTOR "1"
CONTRACTOR "2"
NWC TESTING
OPERATIONAL TESTING
CDR-1
CDR-2/PROGRAM REVIEW
ECP APPROVAL
DESIGN
CONFIGURATION CONTROL
MOU
RFP
CA
LL
FAB
6
20
0-100
INITIAL PRODUCTION
5
(6)(12)
(8) (16)
(12) (24)
GROUND QUAL TESTING
(4) (8) CAPTIVE
(8) (16) FIRINGS

FY	84	85	86	87	88	89	90
RDT&E Funding(TY M$)							
Required	20	30	35	35*	35*	25*	15*
Available	20	30	36	26	16	4	

* Preliminary Estimate

JVX PROGRAM

Senator **Rudman**. Let's go back to part of your statement on page 11, and I will quote it to you: "The Defense Science Board recommends that full-scale development be funded by a single military department."

Last year, we merged all of the R&D funds for the JVX Program into the Navy. Why shouldn't we merge all of the R&D funds for full-scale development of the JTACM missile and the JSTARS radar into one service? Shouldn't the Army be taking the lead in this program?

Dr. **DeLauer**. I think that probably in JSTARS, you could have one service. I think that in the case of the platform for the delivery systems, the solutions for the Army and the Air Force will be different, and they ought to go their separate ways. As far as the radar itself is concerned, that development can indeed be merged.

Senator **Rudman**. Since the Defense Science Board has recommended, and since there is a strong feeling with many people that we ought to do that, then it just seems to me that if we can, it would be very nice. You might submit, for the record, further thoughts on that.

Dr. **DeLauer**. We did that on JVX.

Senator **Rudman**. Yes.

Dr. **DeLauer**. When push came to shove on JVX, we finally said: Look, Navy, you are in charge, and the rest of you people have to support it with what it needs.

Senator **Rudman**. Do you believe that the JTACM should still be a joint development program?

Dr. **DeLauer**. No; we will look at it, but it may have to be a separate program, but JSTARS, I think, could be a joint program. It may actually be given to one service.

Senator **Rudman**. I have been going here for about an hour, and I appreciate the fact that my friend from North Dakota is here. I am going to take a short break, if he would like to ask some questions.

Senator **Andrews**. I will be glad to ask some questions, my voice never wears out, and Brother DeLauer would love nothing better.

Dr. **DeLauer**. How do you do, Senator. Let me start off by saying that we are all for warranties, sir.

Senator **Andrews**. I appreciate that. I am so convinced that you have seen the wisdom of that that I didn't even bring along any questions about the warranties.

Dr. **DeLauer**. I thought that you had them committed to memory.

Senator **Andrews**. I can make them up as we go along.

Dr. **DeLauer**. No; I would rather have the old ones, so I will wait.

Senator **Andrews**. Do you mean that we have finally taught you the answers to the old ones.

Dr. **DeLauer**. I am a slow learner. [Laughter.]

Senator **Andrews**. You are coming around.

JOINT ACQUISITIONS

Doctor, one of the biggest obstacles in joint acquisitions is getting the services to agree to joint requirements.

Dr. **DeLauer**. That is right.

Senator **Andrews**. In November 1983, the GAO report concluded that each service believes that its concept of a new aircraft, a new missile, or a new vehicle, will be best for their mission, and they oppose compromise of its design and performance goal.

Doctor, what kind of management tools have been utilized to smooth over these differences, and to get the services to compromise on design and performance goals?

Dr. **DeLauer**. Senator, I covered that a little bit in my opening comments. This is the toughest problem we have.

Senator **Andrews**. That is why I want to get into it a little bit. We remember the joint use concept back in the McNamara days of an airplane that was going to take care of all services, and then we found out that it was kind of an ugly duck that didn't really fly very well.

Dr. **DeLauer**. Sure, but we could use a lot more of them right now. It took 20 years to figure that out.

Senator **Andrews**. Had we been able to buy them way back then, we could have brought them a lot cheaper, if somebody could have figured out the differences.

Dr. **DeLauer**. The problem in many cases is characterized by the joint operating requirements. In many cases, it has to do partly with the doctrine of its utilization. We had a little discussion just a few minutes ago about hand-held antitank weapons. Some of it has to do with the way the services look at that particular function.

The Defense Science Board report that Senator Rudman just quoted was chaired last summer by Ike Kidd and Bill DePew as chairmen, two people who have been in the requirements business, as well as the acquisitions business. They came up with some of these recommendations, some which, by the way, I have a problem with. But it was their recommendation that we assign it to one service or the other.

JOINT MANAGEMENT REQUIREMENT BOARD

They also made a stronger recommendation that says that what we ought to do on possible joint programs is to create a Joint Management Requirements Board, and that that should be focused as an ad hoc function of the JCS organization. The membership should consist of the Vice Chiefs of Staff of each of the services, plus a member from the JCS and the Assistant Commandant of the Marine Corps, the No. 2 guy, be on this Joint Management Requirements Board. They are to review the requirements and make recommendations for joint programs.

We are right now in the process of issuing that document out of the Chairman's office. I reviewed it over the weekend, and it looks like the best compromise that we can have on the membership, how it should function, and how it should present its results.

I think that this will go a long way in at least addressing the issue before we proceed to charge along and spend money on a particular weapon system, or a weapon system subsystem, without at least addressing the fact of whether or not that should be a multiple-use piece of equipment.

They will recommend which service should develop the particular article for joint use. They will make their recommendations through the Service Secretaries who, in turn, will include it in their submission of their POM, and then we will debate the issue in the summer during the DRB deliberations.

That is when my organizations gets into the act to see that we close the loop and have an oversight on it. This is the first step that we have ever gotten to where the services are being forced to sit down together, to work out these joint things, at a level that is equivalent to the level that allocates resources to the particular subject.

Before we had it done at the lower level, and when it bubbled up through the system. If the leadership didn't think that it was a good idea, it just disappeared. It fell through the woodwork, and it never was proposed to the Secretary. I think that now we have this to where we can do it. We have to give it a chance to work, and I think we might have something.

Senator **Andrews**. It makes a good deal of sense. We all know that agreement between services on a joint program is very difficult, particularly when one or another system is already well into development, with really a hardened design, and major decisions made, and a significant investment undertaken.

SINGLE-SERVICE PROGRAMS

What have we done, or what can be done to see that consolidation of these single-service programs are joined at the front end of their respective acquisition process, instead of trying to put them together afterwards?

Dr. **DeLauer**. The first thing, of course, is to be sure that they have agreement on the utilization of it, and that would be through this Joint Management Requirements Board. The second is that they have to be included in the POM as we review it. Let me give you an example of exactly what happened last year on JVX.

There is just no question that these joint agreements tend to fall apart. I have as a memento of my time in the Pentagon, which I can take with me—it is going to be classic—a letter saying: We are going to jointly develop the JVX. It is signed by three service secretaries. Jack Marsh, Verne Orr, and John Lehman.

Senator **Andrews**. You show it to them every time they come to see you.

Dr. **DeLauer**. It is hanging on my wall. It had a half-life of 30 days. The ink was hardly dry before it started falling apart.

I was elequent in the DRB last year. We did our homework. We showed that the JVX, just from the Navy and Marine Corps standpoint alone, was cost effective. In the meantime, the Air Force guys wanted to buy some HELO's for special missions. The Army wanted to embark on the LHX Program. I had the right ingredients. I wouldn't support the LHX, unless they supported the JVX. I wouldn't agree to some other things, not the HELO's, but there are a lot of airplane programs that the Air Force thought they needed.

It turned out that they needed some support. We did a little horse trading.

Finally, what we decided was that the Navy would develop and fund the JVX, and support it here in Congress. The Army committed. They reviewed their needs out into the next 10 years in the LHX Program. They said: If the JVX is developed, we will use this number. The Air Force did the same. We added the requirements together, and the commitments to those programs, and it came out to be an economical program, and the JVX is continuing to go.

Now our job is to see that nobody falls off of that train, and the way we can do it, at least I hope my successors will not let the Army go spend money in the LHX Program for needs that the JVX can satisfy, the same goes for the Air Force on some of their misions that need a vertical lift capability.

This is just hard work. There is no panacea. You sit in there, and you drive a bargain.

Senator **Andrews**. I appreciate that, doctor. I have a little thing on my wall, too, that I got in a little different way.

Our family would not have gone to North Dakota if it had not been for discrimination in New York City. It is a little difficult to understand problably, but my grandmother was a doctor, and her husband was too. They were classmates. They practiced medicine in New York City in 1877 and 1878, and there wasn't a whale of recognition of a woman physician in New York City 100 years ago or so. So they packed up and went out to the frontier.

They got to the territory 3 years after one of your colonels, trying to become President, got into a mess with the Indians. The natives didn't quite cooperate with Custer, as you will recall. But my grandmother made quite a place for herself out there in the frontier. They started a drugstore, and practiced medicine together, and our family has been there ever since.

She had on her wall, and I still have it on mine, a very simple plaque. It says, "To escape criticism, do nothing, say nothing, and be nothing." You and I got a whale of a lot of criticism from time to time, and that is the reason for my bringing up this thing on my wall, doctor.

Dr. **DeLauer**. Mine is always the wrong way. I don't get to criticize you hardly at all. [Laughter.]

FRONT-END JOINING

Senator **Andrews**. What are we doing to make sure that we do get this front-end joining that we are talking about?

Do you have in place right now this kind of a program to see that these programs are joined at the front end of their acquisition process, or is this a goal?

Dr. **DeLauer**. I can't answer you and say that we have it in place right this instant, but we are closer now than we have ever been. It is not a goal, it is going to be a fact.

As a matter of fact, I think you will see that the very first thing to come out of it is an agreement on how to handle the assault and the follow-on forces, the JTACM, JSTARS, and that area. That came up right in the front end in an agreement between the Army and the Air Force in regard to how they are going to do that job.

Now what we have to do—and this is where the oversight of the Congress comes in—is keep our feet to the fire, and don't let us change our mind when some new people show up. I think you can do that.

GAO GUIDELINES ON PROGRAM CANDIDATES

Senator **ANDREWS**. As I understand, the GAO suggested a group of guidelines to help select more promising joint program candidates, and those guidelines that were put forth by GAO were that essential service doctrines would not be unduly compromised; that the programs are still malleable, that is, not too far down the development road at merger time, which has to do, really, with our front-end type of concept; that military effectiveness will not be unduly lessened; that the potential economies are persuasive; and that there is conspicuous support by Congress, OSD, the top military officers, and JCS. The letter on your wall indicates that there is in JCS.

Can you provide us with any insight into your view of these guidelines, and what they would bring?

Dr. **DELAUER**. I think that they are solid. They are applicable to the situation. I think that these are the bases on which this Joint Management Requirements Board will have to operate. They will have to answer every one of these questions. I think that we can be sure that the GAC considerations will be included in the precepts of this particular agreement that is now being reached at the JCS group. I can have that done.

Senator **ANDREWS**. Sure.

Dr. **DELAUER**. At least, we will have a sense of the basis for arriving at some of these programs. We will have to consider these particular kinds of questions before we can either accept or reject a joint program, and we will do that.

Senator **ANDREWS**. When all of this is put together, and coupled up with the warranty requirement, we will know that we will get a serviceable and workable weapon at the lowest net cost.

Dr. **DELAUER**. You are pushing things. Here is the beginning of the program, and you are telling me that I must do this in the production contracts.

Senator **ANDREWS**. That is right.

Dr. **DELAUER**. There are a few years in between.

Senator **ANDREWS**. But the point is, and you and I have discussed this, there is no way that you can get a warranty on a prototype. I think that we can work out language so that there is not the necessity for warranty on the first seven or eight weapons that come off of the production line. But once you get into production, you and I are both now at the point where we agree that warranties will help move toward these goals we have just discussed.

Dr. **DELAUER**. I have no problem at all. I am even more supportive than you believe. I could get it on the prototype if you would let me have the flexibility.

Senator **ANDREWS**. I don't really think that we need a warranty on the prototype. I think the appalling problem that we have had has been when we start ginning out these weapons at a rapid clip, and suddenly we find out that they don't work.

I think, as you know, part of melding the design and engineering capability of the private sector into a review of the performance requirement that is coming out from the Pentagon is that a warranty gets them in, in a way that has a power incentive. I think we are working toward the right goal.

I think that it is kind of fun to have you come up and not talk about warranties through the whole thing. It is refreshing for both of us.

Senator **Rudman**. I am convinced.

Senator **Andrews**. But you were convinced long before we had him convinced.

Dr. **DeLauer**. There is nothing I like better than to have a hearing where you think I am responding to you for a change.

Senator **Andrews**. It takes a while, but there gets to be an understanding.

FUNDS FOR SUPPORTING WARRANTIES

How many dollars have you requested in 1985 to support warranties? Is there a budget item in here, Doctor, for warranties?

Dr. **DeLauer**. That will have to come out of the procurement.

Senator **Andrews**. That will come out of the regular procurement.

Dr. **DeLauer**. Yes; as a matter of fact, we have a pretty good handle on one right now. We are just about through on a warranty on HARM. There is a program that is going to warm the cockles of your heart. The Navy is going to get a warranty in MTBF, meantime between failure, which is the best thing that you can get for a missile system.

Senator **Andrews**. Doctor, I would be remiss, as long as we are on the subject, if I didn't mention that Senator Rudman and I had breakfast with Secretary Lehman a month or two ago, and he told us that they had gotten a much better contract, a much better deal for the Government on the carrier, with a mandatory warranty requirement than they could have gotten without it. So the system is working.

Thank you, Senator.

Senator **Rudman**. Dr. DeLauer, we thank you very much. We are going to have classified questions that we are going to submit to you for the record, and a few others that will not be classified.

I am going to use a fair amount of what you have said today in what I am presently working on. Since it is part of the public record, I won't dwell on this, but I happen to think that the approach that Senator Andrews is talking about, and that you represent, which is the way we do things now, because of the built-in problems that we all know in the services, is bound never to work as well as it ought to.

It is curious but true that we are the only country, friend or foe, that procures the way we procure. You know that as well as I do. I have looked at the British model, and I have looked at the French model. I don't know too much about the Soviet model. But I am convinced more than ever that this consolidation is going to have to take place in terms of the whole structure of how we procure, how we do R&D, and how we do test and evaluation.

It will be strongly resisted by the services. It will be a long time in accomplishing, but I believe that we will look at, sometime in this decade, changing this because of the very nature of the dialog that you and I have been having this morning, and what you and Senator Andrews have been talking about.

Dr. **DeLauer**. Let me make a gratuitous response to that.

One of the things that I hope you are taking a look at is the fact that our industry is reasonably matured. When you look at how much of our resources are spent in the bidding process—you know, we lump our IR&D, bidding and proposal into one overhead element, one G&A element, and we report to Congress every year about at least the top 100 people, and how much they are spending on that.

I think our bidding costs are too high, and one of the things that I would suggest you take a look at, because it has to come from Congress. I think that we can have competition, and have extremely good competition, and have good products, but have a different way that we approach the source selection process.

SHORT LIST

For instance, in construction, they have a thing called the short list. People put their qualifications in. Pretty soon you chop the list down, and you end up with a short list. Then somebody comes in with a detailed proposal, and you select. In most cases, construction generally goes with a sealed bid.

We found, and I think that you are arguing time and time again, that multiple sources lead to the most competitive and the lowest cost for that particular article. I think that there is a quicker way to getting two producers, which provide the competition, without going through this crazy bidding process that we do now.

AMRAAM

AMRAAM to me is the worst example. We spent $150 million on three people, Hughes, Raytheon, and the Air Force, to fly six lousy missiles, and to finally select somebody to lead the parade that 6 months later we selected the second guy to follow. That could have been done ahead of time. We could have taken the $150 million, and spent it on trying to put that missile into production, just what we are trying to do in the low cost HARM Seeker.

You can get competition without having to have a cast of thousands bidding on every single proposal. Now, this is going to call for some rationalization of the industry, but in certain cases, it rationalizes itself. That is something I would suggest, if you have not already examined it.

Senator **Rudman**. As a matter of fact, I think that kind of result precisely from what I am going to propose in terms of the kind of structure because, you see, it tends to draw it all under one umbrella, with each of the services having major input as to what they need and desire, but it changes the way we do it.

I am convinced, after some investigation, that if you look at the three services in one particular area, the procurement of small engines, for instance—not jet engines, but small engines, or the procurement of certain types of test equipment—that literally they are reinventing the wheel day after day after day.

I am not talking about the grand programs that we all know about, B-1, MX, AMRAAM, HARM, or Trident. I am talking about an area where there is a great deal of procurement, and where there is tremendous duplication in bidding, in testing, and in evaluation.

Dr. DeLauer. The whole thing.

Senator Rudman. It really has to be changed.

JVX

Mr. Cann. Senator, on the JVX, when we found ourselves in the position of essentially having one bidder, which is the Bell-Boeing team, we just made a fundamental decision that before we ever started the program, we were going to have competition. We are in the process now of structuring the program in such a way that before we make a full scale development decision, we will be in competition between the two companies who are teamed together for the first lot.

We will also be in a position at the end of the first lot production, if we don't like what they are doing, we will have a full data package that will be validated for anybody in the industry.

Senator Rudman. I am familiar with that, and that is the way you have to go as you are presently structured.

Dr. DeLauer, we want to thank you again for your very candid and forthright testimony, and the appearance of your colleagues with you this morning.

Our next hearing will be a windup hearing. We have reversed the order this year, and at 10 o'clock, on the 24th, Secretary Weinberger will be here to testify on the defense budget, and then we will try to put it all together.

Dr. DeLauer. We will be behind him back there.

SUBMITTED QUESTIONS

Senator Rudman. Thank you very much.

There are a number of additional questions which we will submit for your response. They will be inserted at this point in the record.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

ADDITIONAL COMMITTEE QUESTIONS

Joint Programs

Question: Although the budget has not contained a nickel for it, Congress has generously appropriated $250 million over the past two years for cooperative air base defense in NATO. To date, we understand, none of this funding has been obligated.

Again this year there is no budget request for this cooperative air base defense, but the House Armed Services Committee has recommended another $350 million for it.

Does the Department support this funding? And if so, why has none of it ever been budgeted?

Answer: The Department of Defense does support this effort. However, the obligation of funds for NATO Cooperative Air Defense programs requires that we have a detailed agreement with each of the Host Nations. These agreements must be endorsed by each country's Department of Defense prior to submission to Congress. We are currently in negotiation with Germany and have had preliminary discussions with Turkey for air defense programs in these countries. These cooperative agreements will improve NATO air defense and, in particular, air defense of US air bases in both countries.

The basis for the agreement is that each country provides equipment and manning for this critical mission area. In the case of the agreement with the Germans, the US provides Patriot high and medium altitude air defense systems to Germany and in return Germany mans two battalions of US Patriots and provides and mans Roland point air defense weapons for the defense of three US air bases in Germany.

It should be recognized that entry into a cooperative arrangement takes considerable time and negotiation. Negotiations to reach a detailed US/United Kingdom Memorandum of Understanding (MOU) on Rapier took two years after the initial agreement in principle. The lag time reflects a realistic period between the broad agreement to do something, and the more detailed agreement on such necessary items as delivery schedules.

Question: In providing $200 million in air base defense funding last year, Congress required the submission of any agreement with a foreign government along with any pertinent backup information before the funds could be obligated.

When do you plan to make such a submission?

Answer: Negotiations for the US-FRG Cooperative Air Defense Agreement have taken longer than anticipated causing a delay in the formal submission of the agreement to Congress. This delay is considered temporary and it is expected that the air base agreement will be submitted to Congress before the end of the summer, 1984.

The Department is fully cognizant of Congressional interests in strengthening air base defense in Europe and wishes to work closely with Congress on this important objective. In addition to informal consultations with Congress, the Department will submit all necessry documentation as the agreement evolves. In all cases, the Department makes it clear to our foreign partners that co-operative air base defense agreements, as with all government-to-government agreements, must comply with US legislation and are subject to Congressional review.

Question: Why should Congress appropriate still more funding for NATO air base defense when the Department cannot negotiate an agreement to utilize the $250 million already available?

Answer: Strengthening NATO air defense including air base defense is among the top priorities for NATO conventional forces. This priority is supported by every member of the Alliance, the NATO Commanders and, indeed, Congress itself.

The Department appreciates the support of Congress for cooperative NATO air base defense arrangements and we expect to finalize in the near future the details of an Implementing Agreement with the FRG. Such arrangements require considerable time to negotiate. In fact, negotiations with the Germans are proceeding rather quickly compared to the US-UK Memorandum of Understanding of Rapier which required two years after the initial agreement in principle was made.

Additional funding for NATO air base defense would be a welcome Congressional initiative. The Department would request the flexibility to apply additional appropriations where the US would get the maximum benefit from such funding.

Question: What are the dates of the next US-FRG negotiating session?

Answer: The dates for the last session with the FRG was 1-4 May 1984. The schedule for the next formal session has not been set as yet, but dates in July are expected. The time for signing the implementing addendum to the Ministrial agreement signed on 6 Dec 83 has been tentatively set for mid-July 1984.

Question: Last year the Appropriation Conferees directed that all future NATO air base defense funding requirements be budgeted. There is no 1985 budget request.

Are any funds even programmed in 1986?

Answer: The Army cannot program money to support the US-FRG co-operative air defense agreement until it is finalized, however, it is prepared to support the agreement as soon as it is signed. The Air Force does request funding for Rapier which is used for defense of bases in the United Kingdom. The US Army also provides defense for air bases in Germany with Chaparral, Vulcan, and IHAWK units. Funding for these units is contained in the appropriate missile procurement lines in the Army's budget. Other funding related to NATO air base defense might include items such as Research, Development, Training and Evaluation, and Operations and Maintenance. These costs would also be included in other parts of the Defense Budget.

The Department has not programmed funds for new cooperative air base defense programs but believes they are definitely worth exploring.

Question: What are the specific obstacles to these agreements? And explain why we should not dump the whole concept and redirect the money already appropriated to other high priority requirements.

Answer: These agreements break new ground. The US-FRG Cooperative Air Defense agreement is extremely complex requiring budgeting and planning projections for equipment and manning for up to 15 years in the future. These agreements are to substantially improve NATO Air Defense and to provide protection for US Air Bases that are presently unprotected from air attack. Therefore, they are of critical importance to the present and future survivability and viability of the NATO forces. The Ministerial agreement between the Federal Republic of Germany and the United States was signed on 6 Dec 83. The detailed implementing articles are scheduled for signing by the Defense Ministers during July 84. [Deleted.]

We are pursuing these agreements at the highest priority and forecast that the benefits that the US will obtain from their successful conclusion will more than offset the funds and efforts they require to implement.

QUESTION: In light of the President's draft treaty for a ban on both production and stockpiling of chemical weapons, why are all of the pre-production funds still needed?

ANSWER: The FY 1985 request for funds for partial preparation to produce new chemical weapons was specifically formulated to support U.S. chemical arms control initiatives while making some progress toward resolving a critical military deficiency. It reflects the intent of the FY 1984 Authorization Act, which struck a balance between the need to redress the military deficiency and our desire for a complete, verifiable ban on chemical weapons. If we do not take steps to reestablish a credible chemical deterrent, we invite Soviet chemical use and offer them no incentive to join us in a ban. They currently enjoy an unchallenged chemical weapons superiority and have no incentive to negotiate it away.

QUESTION: What is your assessment of the House Armed Services proposal to establish a special bipartisan Chemical Warfare Review Commission which would apparently have to recommend the initiation of chemical weapons production?

ANSWER: We are still evaluating the proposal for a bipartisan commission. Our tentative view is that a commission might have the potential to develop a national concensus on how to deal with the dangerous and growing threat of chemical warfare. We have developed what we believe to be a balanced program emphasizing both arms control and deterrence to counter that threat. For the past two years Congress has undercut that program while offering no viable alternatives. The situation is extremely dangerous and must be addressed, and such a commission might offer those who have opposed our program an incentive to surface whatever alternatives they might have.

ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE - R&D PROBLEMS

QUESTION: The Department's original request of $431 million to initiate procurement of 174 AMRAAM missiles in 1985 is being cut to $326 million and 154 missiles. What R&D problems are being encountered?

ANSWER: Through the FY 1985 Revised President's Budget, AMRAAM procurement was decreased from $431 million to $109.1 million. The Air Force decided to reduce procurement since it appeared that a Lot I production decision would not be feasible in FY 1985 due to full scale development (FSD) delays.

We are currently experiencing some difficulties in the guidance system, mostly in the quality of subcomponents, integration, and test equipment areas; but, Hughes is energetically pursuing the solution of these problems. In a technical sense, the problems being experienced are design integration issues and are of a nature expected in any major development program. Hughes is weeding out subcontractors with subpar performance and developing replacements as well as solving the quirks of high voltage systems confined in a small volume. This is the most difficult phase of the design cycle, and laboratory test and evaluation efforts are in full force to eliminate the problems. In summary, flight worthy components for the first AMRAAM missiles are in system integration and problems are being solved as they occur. Missile software for first flights is satisfactory.

AMRAAM - UNIT COSTS

QUESTION: What impact, if any, will the program delay have on production unit costs?

ANSWER: Due to delays in the full scale development (FSD) program, the Air Force decided not to exercise the Lot I long lead production decision in Jan 1984. Since the Air Force did not exercise the FY 84 long lead, the FY 1985 Revised President's Budget lowered the FY 85 AMRAAM production budget from $413 million to $109.1 million. This reduced budget is insufficient to purchase the minimum number of missiles required by contract; therefore, the pre-priced production options currently available will be lost. This loss will likely escalate the AMRAAM production unit cost.

The AMRAAM FSD and production programs will be restructured this summer to reflect the current schedule and budget. Subsequent to this action, a new cost estimate will be completed. After this analysis, the Air Force can provide new unit cost estimates to the Committee.

AMRAAM - TESTING

QUESTION: Does the Department still plan to attempt only six test flights before executing the lot 1 production contract? Is that really enough testing?

ANSWER: The Air Force had originally established six flight tests as one of the Air Force Acquisition Review Council (AFSARC) criteria necessary for making the Lot I production decision. However, this decision will be postponed from October 1984 to a date as yet undetermined, allowing considerably more than six missiles to be flown before the Lot I production decision will actually be made. This delay will significantly reduce concurrency between AMRAAM full scale development (FSD) and production.

AMRAAM - IMPACT OF PRODUCTION DELAY

QUESTION: What would be the impact of delaying missile production until 1986?

ANSWER: The AMRAAM production program was slipped significantly in the FY 1985 Revised President's Budget delaying the Lot I production decision from FY 1985 to FY 1986 and negating the pre-priced production options. This delay is expected to slip the AMRAAM/F-16 initial operational capability (IOC) by at least one year. In addition, losing the original pre-priced production options will most likely increase missile unit costs.

Unit costs and IOC impacts will be more clearly defined following the decision expected this summer on a restructured AMRAAM program. If desired, we will provide the Committee with details on the impacts of production delays following this decision.

AMRAAM - COMPETITION

QUESTION: What are your plans for maintaining the competitive second source of supply and how important is that competition to this program?

ANSWER: The Air Force firmly believes that eventual competition between the leader contractor and the follower contractor is essential to assuring an affordable AMRAAM. In considering a restructured AMRAAM program this summer, we will stress enhancement of the follower's learning process leading them to a competitive position as early as possible. We anticipate that the FY 85 production program will contain elements to encourage follower development such as special test equipment (STE) for the follower, clearly defined leader responsibilities to the follower, and enhanced producibility efforts to be shared by the leader and follower. Follower development will be a major consideration throughout AMRAAM's program life.

AMRAAM - INCREASED FUNDING FOR FY 86 PRODUCTION

QUESTION: I understand that the total revised 1985 and 1986 AMRAAM procurement is less than the 174 for which $29.4 million was provided last year. Why then is another $35 million requested this year for 1986 production?

ANSWER: The Air Force has not yet completed the production program restructure; therefore, the planned quantities of missiles for FY 86 and on are not yet firm. However, preliminary estimates indicate that we will need approximately $35 million in FY 85 advance procurement funds to support the FY 86 buy.

The $29.4 million advance procurement funds from FY 84 will be used in FY 85 to support a program aimed at enhancing missile affordability through producibility efforts and actions for effective competition (special tooling and test equipment for the follower and follower assistance).

AMRAAM - RESTRUCTURED PROGRAM

QUESTION: Provide the details of the restructured program for the record.

ANSWER: The Air Force will make a decision on a restructured AMRAAM program this summer and will provide the Committee with details on such as they become available.

ASRAAM

QUESTION: Just what are the terms of the NATO program agreement on ASRAAM?

ANSWER: The terms of the NATO agreement are contained in a Memorandum of Understanding (MOU) between the Ministers of Defence of the Republic of France and the Federal Republic of Germany and the Secretary of State for Defence of the United Kingdom and the U.S. Secretary of Defense concerning a cooperative program for a family of advanced air-to-air missile systems. Excerpts from this MOU are attached.

LICENSING AND TECHNICAL ASSISTANCE FOR CO-ASSEMBLY, DUAL-PRODUCTION AND SALES

[Deleted.]

TRANSFER AUTHORIZATIONS

[Deleted.]

AIM-9M Product Improvements

QUESTION: Why should we start a costly product improvement on the AIM-9M if we are due to produce ASRAAM in the early 1990s?

ANSWER: The AIM-9M PIP RDT&E Program is scheduled to commence in FY 85. AIM-9M PIP will upgrade U.S. Forces with a superior air-to-air missile [deleted.] PIP will also provide increased counter countermeasures capability to defeat [deleted] [deleted]. The widespread sales of the AIM-9L gives FMS Forces (and hostile forces, if AIM-9L is compromised) a weapon approximately equivalent to the AIM-9M. The AIM-9M PIP will provide the performance edge for the U.S. Forces. The technology for PIP exists now and the program start is simply awaiting funds availability. The AIM-9M PIP will fill the threat gap until ASRAAM is introduced into the U.S. inventory [deleted]. Based on the funding profile in the FY 85 President's Budget Submission, the Initial Operational Capability (IOC) can be met in [deleted.]

The Air-to-Air Family of Weapons MOU specifically allows improvement to any existing missile systems such as the AIM-9M. AIM-9M PIP performance and schedule is not in conflict with the European ASRAAM but fits midway AIM-9M and ASRAAM both in performance and schedule. The scope of AIM-9M PIP and its relationship to ASRAAM has been discussed with the Europeans and has not been an issue.

ASRAAM - TECHNICAL APPROACH/FSD

QUESTION: Has the ASRAAM technical approach been determined? When will full-scale development start?

ANSWER: The technical approach for ASRAAM will be defined in a Project Definition Phase during the period mid CY 1984 to mid CY 1986. Full scale development will begin after completion of the Project Definition Phase.

TOMAHAWK EFFECTIVENESS

QUESTION: At $3 million a copy, is the TOMAHAWK really effective in a conventional role with only a 1,000-pound bomb?

ANSWER: The effectiveness of a weapon is based, in part, on the size of the warhead and the accuracy of delivery. Of these two factors, the latter is the more important. A cruise missile such as the TOMAHAWK Land Attack Missile/Conventional (TLAM/C), by virtue of its advanced guidance and terrain following subcomponents, promises to have a Circular Error Probable (CEP) measured [deleted.] It is therefore an ideal weapon for use against high value targets (e.g., power stations, aircraft maintenance facilities, etc.). In this role, TLAM/C would be highly cost effective, particularly if its employment were to prevent or lessen the attrition of costly attack aircraft and their crews.

CRUISE MISSILE CONTROLS

QUESTION: The Committee is often told that use of conventional missiles raises the nuclear threshold. Yet conventional land attack TOMAHAWKS will look the same as nuclear TOMAHAWKS on enemy radar.

We are aware of the controls used for nuclear weapons. What controls and engagement rules are there for weapons which are undistinguishable from nuclear weapons?

ANSWER: This question involves two separate and distinct considerations:

- The basic verification problem associated with the several variants of the TOMAHAWK Sea Launched Cruise Missile (SLCM) is that from all external appearances, they are not distinguishable from one another by the casual observer. However, personnel having responsibility for access, storage, maintenance and launch will have knowledge of the missile variant in each case. The electrical inputs required for successful launch vary with each missile variant, and each vehicle type must be prepared differently for launch.
- Ordnance security controls and launch release procedures, etc., that will be imposed to prevent inadvertent launch of a conventionally armed TOMAHAWK (TLAM/C and TASM) will ge generally similar in nature and scope of those of other conventional missile weaponry of this class.
- The rules of engagement for the employment of weapons available in an arsenal vary with the circumstances of any given situation.

TOMAHAWK COMPETITION

QUESTION: The Department was not able to execute its planned competitive TOMAHAWK procurement in 1984 because the technology transfer was not complete.

Is everything on schedule so that there can be full competition between the two sources of production in 1985?

ANSWER: Yes; the Joint Cruise Missile Projects Office is now proceeding on schedule to dual source procure the FY85 TOMAHAWK SLCM buy of 180 missiles.

Joint Programs in FSD

QUESTION: Shouldn't the Army be taking the lead on these programs? (JSTARS, JTACMS)

ANSWER: The Army is the lead Service on JTACMS. If the House zeroing of Air Force JSTARS funding is supported in Conference, it would make sense for the Army to assume the development lead for JSTARS.

QUESTION: Why hasn't OSD resolved the JSTARS platform issue with the Air Force by now?

ANSWER: The JSTARS platform issue is complex. The recent Army/Air Force MOU identifies the C-18 as the single platform for the JSTARS. However, OSD is concerned the C-18 proposal has survivability problems. The Senate FY 85 appropriations language supports the Army/Air Force decision while the current House appropriations language plus the FY 84 Authorization Act prohibits the installation of the JSTARS on the C-18 because of survivability issues. It is our intent to comply with Congressional guidance. It is also our intent to proceed with the JSTARS program. In this regard OSD has instructed the Services to proceed with the radar development, as stated in the Request for Proposal to industry, independent of the final platform decision. The final platform decision will be made after the survivability issues have been adequately addressed in the Department and with the Congress.

QUESTION: The House Armed Services Committee denied this year's Air Force portion of JSTARS, some $95 million, and recommended that the radar developed by the Army be capable of being integrated into the TR-1. What is the OSD response to this alternative?

ANSWER: We oppose any reduction in JSTARS funding. The OSD position on the radar and the recently signed MOU between the Army and Air Force both stipulate the Air Force is lead for this development. The House and Senate committees will have to resolve the JSTARS funding in conference. We have requested the Services to proceed with radar development as stated in the current RFP and which is common to the various platform options being considered.

JTACMS - SINGLE MISSILE

QUESTION: In your opinion, could a single missile be developed for ground launch and evolved for use by our fighter and attack aircraft?

ANSWER: It is certainly feasible to use this approach, however, the Army is still studying its standoff weapon requirements. Once these requirements are defined and compared to the Air Force requirements, a more definitive answer can be provided.

JTACMS - IMPACT OF HOUSE CUT

QUESTION: If sustained, what impact would the House cut have on the JTACMS development program?

ANSWER: While the House language allows the Air Force to reprogram funds from its available appropriation to fund its alternate technology program, sufficient funds may not be identified for reprogramming because of competing priorities. This would result in delay of the development program. Restoring the House cut would ensure that sufficient funds are available to execute the program and build a system to meet the Air Force standoff requirements.

MLRS - MERITS AND SHORTCOMINGS

QUESTION: We understand that the Army is reviewing its second echelon attack requirements, and has examined the feasibility of going with a lower-cost, extended-range MLRS. What merits and shortcomings are there in moving away from a single joint missile and to an air launched missile and a longer range rocket like MLRS?

ANSWER: From the Services' perspectives, a single joint missile may not be the most cost effective or operationally suitable way to meet the standoff weapon requirements. The perceived advantages of separate air-launched and ground-launched missiles are that they can be individually tailored to fit the needs of force structure, combat effectiveness, and affordability.

The advantages of a single joint missile are assured interoperability, potential cost savings and early IOC. The recent Army-Air Force Chiefs of Staff Memorandum of Agreement strongly addresses interoperability, committing the Services to a program that includes the joint development of procedures to ensure that respective Service components of JTACMS are fully complementary.

JTACMS - RANGE REQUIREMENT

QUESTION: Has the range requirement for JTACMS been finalized?

ANSWER: The Air Force has established its range requirements for JTACMS. The Army has not.

JTACMS - AF/ARMY AGREEMENT

QUESTION: Provide for the record details of the Air Force-Army agreement on JTACMS which supports your recommendation for 2 separate development programs.

ANSWER: The service Chiefs of Staff signed an MOA on 22 May 84 agreeing on a list of 31 initiatives. Item 18 on that list states:

Initiatives on the Joint Tactical Missile System (JTACMS):

a. The Army and Air Force will develop a joint Statement of Need for the JTACMS. The restructured program will include the joint development of procedures to ensure that respective service components of JTACMS are fully complementary.

b. The Army will refocus its current development efforts on a shorter range ground-launched system.

c. The Air Force will develop an air-launched system.

JTACMS

The Department is asking Congress to repeal last year's prohibition against developing a nuclear warhead for JTACMS. You said the restriction "could place our forces at a disadvantage should it become necessary to include a nuclear option on the missile system."

QUESTION: Are you planning to move ahead, then, with the development and integration of such a nuclear warhead? How?

ANSWER: The Army does not currently plan to develop nor integrate a nuclear warhead for the JTACMS.

JTACMS NUCLEAR WARHEAD

The Department is asking Congress to repeal last year's prohibition against developing a nuclear warhead for JTACMS. You said the restriction "could place our forces at a disadvantage should it become necessary to include a nuclear option on the missile system."

QUESTION: Do you have R&D funds programmed for such a warhead?

ANSWER: No. The Army has no R&D funds programed for development of a nuclear warhead for JTACMS.

QUESTION: What about the Army's 155mm nuclear projectile? Is anything budgeted?

ANSWER: Yes - the Army FY 1985 RDTE request includes $15.0M to continue engineering development of the Improved 155mm Nuclear Projectile (XM785/W82). The Army and Defense Department believe this projectile is required as a key deterrent to war and therefore support the need to complete development and enter production for the Improved 155mm Nuclear Projectile.

TACTICAL NUCLEAR WEAPON DEVELOPMENT

QUESTION: Just what is the Department's position on tactical nuclear weapon development:

ANSWER: The primary objective of tactical nuclear weapon development is to modernize the aging nuclear stockpile so that its deterrent effect can be sustained in the face of aggressive Soviet expansion in both conventional and tactical nuclear capabilities. A major advantage of this modernization effort is that new technology will increase reliability, effectiveness, safety and security, so that the overall tactical nuclear stockpile can be reduced in size without loss of capability. Nuclear artillery modernization is an important part of this effort. The W79 8-inch nuclear projectile now in production will replace the 27 year old current projectile. Modernization of the obsolete, existing 155mm projectile is critical. Almost 75 percent of the NATO short-range nuclear capability consists of 155mm howitzers and the current round is losing reliability and effectiveness because of aging.

SECOND ECHELON WEAPONS

QUESTION: Second Echelon weapons are said to "raise" the nuclear threshold. Isn't the opposite also a possibility -- that the Soviet may not be able to distinguish the intent of such strikes, and retaliate with nuclear weapons instead?

ANSWER: Second echelon weapons enhance conventional capabilities and complement the tactical nuclear forces to provide increased deterrence and "raise" the nuclear threshold. However, second echelon conventional weapons cannot carry the same psychological message to the Soviets as nuclear weapons - nuclear use is a qualitative change in the conflict. A balance of nuclear and conventional capabilities is required to insure deterrence can be maintained across a wide range of potential conflict situations.

NATO Emerging Technologies

QUESTION: These conventional systems based on emerging technologies are expensive. What is being done to encourage greater participation in their production?

ANSWER: We are pushing exploitation of emerging technologies to improve allies conventional capabilities and have offered the following as joint allied programs:

-- [Deleted.]

-- [Deleted.]

NATO Emerging Technologies

QUESTION: Do you propose that the US alone pay for the development of a JTACMS?

ANSWER: No. The DoD Interdiction Executive Board (IEB) has urged the Project Manager (PM) JTACMS, to contact the NATO Allies to determine their interest in participating in a joint JTACMS co-development/co-production program. The PM contacted representatives from the Governments of the United Kingdom, Federal Republic of Germany, Belgium, The Netherlands, and Italy to: explain the system concept of JTACMS; tell what actions the US Army and Air Force are taking regarding JTACMS requirements; and determine the NATO Allies interest in participating in the program. The British and Germans expressed interest and would like to follow the progress of the JTACMS, but have not yet made a definite commitment to actually participate. The Belgians, Dutch and Italians have indicated that they do not have adequate funds to become involved in the program at this time. US industries (Vought and Martin Marietta) have also conducted industry-to-industry contacts with European industries to determine potential teaming arrangements for the JTACMS program.

Pre-full-scale development studies by Vought, Martin Marietta, and Boeing were completed in March 1984 -- and are now being reviewed and evaluated. The results of the evaluations will be incorporated in future discussions with the Allies -- in regard to continued encouragement of Allied participation in the JTACMS program.

NATO EMERGING TECHNOLOGIES

QUESTION: Can you quantify how much US R&D is going into this initiative?

ANSWER: We have taken an initial look at the 11 ET projects accepted by the NATO Defense Ministers and the NATO Armaments Directors in an attempt to identify those US programs which currently, or potentially, coincide with the 11. [Deleted.]

QUESTION: Do you expect that all of these projects could really be put into production and deployed by the end of the decade?

ANSWER: No, however, it is believed that many of them could. The remainder could be deployed early in the next decade given sufficient priority by sponsoring nations.

QUESTION: Do you really expect that all European National Defense Budgets will be increased to permit this initiative to succeed?

ANSWER: We expect ET projects to be funded through two mechanisms. The first is through a reallocation of defense funds to high leverage ET projects at the expense of lower priority projects. The second is a modest increase in the defense budgets or those NATO Nations which actually decide to join one or more ET projects. However, in order for this second mechanism to succeed, we must provide special incentives to our Allies as encouragement. For example, it will be necessary to ensure that each ET project includes an opportunity for Allied Nations' industries to participate in ET projects to a meaningful degree.

QUESTION: Will we have to share our technology with Europe to make this effort work?

ANSWER: The technology to support those of the current 11 ET projects we participate in will be contributed by all the NATO Nations participating in the project. In principle, this is no different than the way NATO Nations participating in cooperative projects currently share responsibility to fund, manage and contribute technology

HARM - LOW COST SEEKER DEVELOPMENT

QUESTION: Please explain what's going on with this program.

ANSWER: The Department of Defense has initiated a sound program for the development of a low cost seeker for HARM. The program is designed to enhance cost control on HARM and also improve the industrial base in the area of anti-radiation guidance technology. The development approach is also in compliance with the guidance contained in the Report of the 1984 Defense Appropriations Conference. However, the FY 1984 funding requirement of this program is $20 million rather than $50,200,000 as indicated in the Conference Report. The required $20 million is available. Consequently, there is no need to reprogram any procurement funds for the development effort.

HARM - LOW COST SEEKER DEVELOPMENT

QUESTION: What's your assessment of the low cost seeker development?

ANSWER: I believe the low cost seeker development program is on track. The effort is structured to provide competition that is tailored to the needs of the HARM program. In addition, the program is funded at a level that permits the development to progress on the schedule proposed by the Naval Weapons Center.

QUESTION: What program redirection did you advocate on the seeker?

ANSWER: The guidance that I issued on the low cost seeker development program was oriented toward improving the proposed development plan in two ways. First, I advocated an approach that gave the Naval Weapons Center full responsibility for the actual design of the seeker. In assigning the Naval Weapons Center this responsibility we will be able to fully draw on the technical talent at the Naval Weapons Center. Second, to ensure that the program can achieve a smooth transition into production I advocated the early infusion of industrial know-how regarding producibility. Consequently, in the directed program, industry will be required to contribute to the design of the low cost seeker, but the design will remain under the detailed configuration control of the Naval Weapons Center.

QUESTION: If it's feasible to accelerate the low cost seeker, how much of the proposed reprogramming should go to that effort?

ANSWER: As structured, the low cost seeker development program will be fully funded with $20 million in FY 1984 and $30 million in FY 1985. This level of funding does not require any reprogramming of resources.

QUESTION: Why accelerate HARM production, as budgeted, before the low cost seeker can be worked into the program?

ANSWER: The purpose in pursuing the HARM low cost seeker development program is to provide a better form of competition than was offered by the proposed investment in a second production source for the current HARM design. The development effort is considered better competition because it not only provides the Government a strong position for price negotiation on HARM, it also improves the technical and industrial base that will be tapped for follow-on anti-radiation defense suppression weapons. Fundamental to the DoD decision on the HARM business strategy, however, is the plan to fund an efficient ramp-up of HARM production. This permits us to address the urgent military requirement for HARM with an economic production program while the seeker development effort works toward further cost reduction. The HARM production profile that has been budgeted will allow us to achieve the expected cost savings.

QUESTION: Provide the details of the recently issued redirection to the low cost seeker program. How much of the $30 million is needed to support this new plan? What is the schedule for getting the low cost seeker into production?

ANSWER: Cost and schedule details concerning the low cost seeker development are contained in the attached USDRE letter to the Defense Appropriations Committees, dated 31 May 1984.

THE UNDER SECRETARY OF DEFENSE
WASHINGTON D C 20301

RESEARCH AND
ENGINEERING

3 1 MAY 1984

(TWP)

Honorable Joseph P. Addabbo
Chairman, Subcommittee on
  Defense
Committee on Appropriations
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

This letter responds to direction contained in the Report of the Fiscal Year 1984 Defense Appropriations Conference regarding the High Speed Anti-Radiation Missile (HARM) program.

In 1983 the Department of Defense recommended the development of a low cost seeker for HARM as a cost control measure. This recommendation was accepted by Congress and specifically addressed in the Fiscal Year 1984 Appropriations Conference Report. The Conferees provided $20,000,000 for the seeker. In addition, the Conference Report directed the Department of Defense to submit a plan for the seeker development program and also directed the Department to submit a reprogramming request in the amount of $30,000,000 so that a total of $50,200,000 is available for the seeker development program.

Enclosed is a copy of the Department's plan for the recommended development program. The plan is consistent with the specific guidance contained in the Conference Report except for one item. In Fiscal Year 1984 the development program cannot efficiently use the entire $50,200,000 recommended by the Congress. The correct Fiscal Year 1984 funding level for the development program prepared by the Naval Weapons Center is $20,000,000. The $30,000,000 required in Fiscal Year 1985 for the development program is requested in the FY 1985 President's Budget Request under Program Elements 64302F and 25601N. Consequently, there is weak justification for reprogramming FY 1984 procurement funds to pursue the development of the low cost seeker.

I therefore ask for relief from the direction that the Department submit a reprogramming request in the amount of $30,000,000 to provide funds for the low cost seeker development.

Sincerely,

James P. Wade Jr

James P. Wade, Jr.
Acting

JOINT NAVY/AIR FORCE HARM LCS PROGRAM PLAN

The following acquisition strategy is planned to accomplish the HARM LCS development effort:

(a) As presented in enclosure (1), a request for proposal (RFP) will be issued in September 1984 to initiate Phase 1 of a two-phase engineering development program to introduce Anti-Radiation Projectile (ARP) technology into the HARM. Two contracts will be awarded. Each contractor will fabricate six engineering models of the low cost seeker assembly (antenna and receiver) for the ten-inch fixed body HARM application. These engineering models will be based on circuits and in some cases supplementary breadboards that have been designed by the NWC. It will be the responsibility of each contractor to translate the design into a producible and reliable seeker assembly. This work will be accomplished with NWC retaining configuration control of the design.

(b) At the completion of this eighteen-month effort the contractors' designs will be evaluated for performance, producibility, reliability and supportability.

(c) The Critical Design Review (CDR) during the fourth quarter of FY 87 will result in the selection of the packaging concept that will be refined in Phase 2 of engineering development. Following the completion of the CDR and prior to a Government commitment to proceed into Phase 2, a program review will be held to evaluate the state of the program. The engineering effort envisioned for Phase 2 will be primarily a final refinement of design for producibility and reliability. The scope of the producibility and reliability design changes for this purpose will be based on recommendations resulting from CDR 2, but the contractors will be held responsible for this engineering under the configuration control of NWC.

The Naval Weapons Center (NAVWPNCEN), China Lake will manage the LCS program and let the contracts for the acquisition plan described above. Specifically NAVWPNCEN will: develop the low cost seeker in-house; contract with industry for fabrication of engineering models and the introduction of design changes necessary for producibility and reliability; chair the source selection evaluation board and be the source selection authority for contractor support; and test and evaluate the low cost seeker.

This proposed strategy complies with the intent and objectives of Congress to:

(a) reduce the production cost of HARM by continued pressure on Texas Instruments:

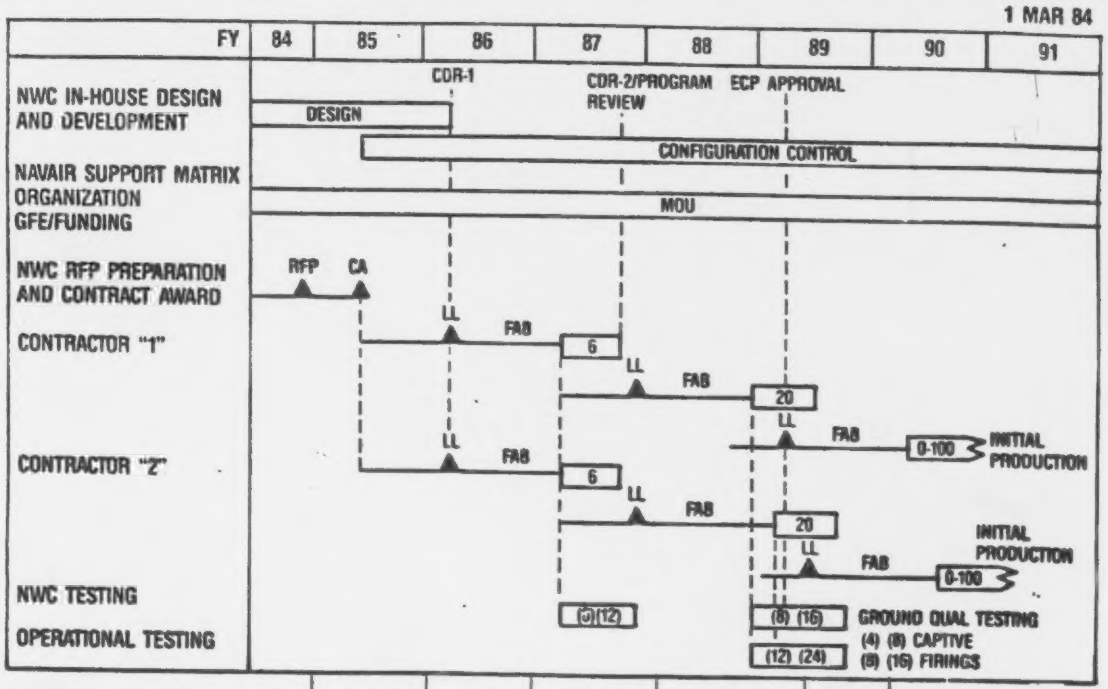
(b) potentially further reduce the cost of HARM by integrating all or parts of a lower cost seeker:

(c) expand the industrial base for HARM and future ARM development/production:

(d) ensure the rapid maturity and transfer of LCS/ARP technology to industry under the technical management of the Naval Weapons Center.

The Navy and Air Force will also, via the above joint effort and separately through solicitation to industry, begin to immediately investigate, through design study evaluations only, all promising ARM seeker technologies including the designs discussed in the preceding section which could satisfy joint service requirements for smaller diameter, lower cost ARM systems. This joint effort along with the on-going Air Force/Navy ARM Review Team efforts, which will be reported out in August 1984, will allow an appropriate decision to be made in FY 1986 regarding (1) the desirability of developing a smaller diameter, lower cost ARM, and (2) the technical approach to be pursued.

LCS PROGRAM STRUCTURE


1 MAR 84
FY
84
85
86
87
88
89
90
91
NWC IN-HOUSE DESIGN AND DEVELOPMENT
CDR-1
CDR-2/PROGRAM REVIEW
ECP APPROVAL
DESIGN
CONFIGURATION CONTROL
NAVAIR SUPPORT MATRIX ORGANIZATION GFE/FUNDING
MOU
NWC RFP PREPARATION AND CONTRACT AWARD
RFP
CA
CONTRACTOR "1"
LL
FAB
6
LL
FAB
20
LL
FAB
0-100
INITIAL PRODUCTION
CONTRACTOR "2"
LL
FAB
6
LL
FAB
20
LL
FAB
0-100
INITIAL PRODUCTION
NWC TESTING
OPERATIONAL TESTING
(6) (12)
(8) (16)
GROUND QUAL TESTING
(4) (8) CAPTIVE
(8) (16) FIRINGS
(12) (24)

FY	84	85	86	87	88	89	90
RDT&E Funding(TY M$)							
Required	20	30	35	35*	35*	25*	15*
Available	20	30	36	26	16	4	

* Preliminary Estimate

THE UNDER SECRETARY OF DEFENSE

WASHINGTON D C 20301

RESEARCH AND
ENGINEERING

3 1 MAY 1984

(TWP)

Honorable Mark O. Hatfield
Chairman, Committee on Appropriations
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

This letter responds to direction contained in the Report of the Fiscal Year 1984 Defense Appropriations Conference regarding the High Speed Anti-Radiation Missile (HARM) program.

In 1983 the Department of Defense recommended the development of a low cost seeker for HARM as a cost control measure. This recommendation was accepted by Congress and specifically addressed in the Fiscal Year 1984 Appropriations Conference Report. The Conferees provided $20,000,000 for the seeker. In addition, the Conference Report directed the Department of Defense to submit a plan for the seeker development program and also directed the Department to submit a reprogramming request in the amount of $30,000,000 so that a total of $50,200,000 is available for the seeker development program.

Enclosed is a copy of the Department's plan for the recommended development program. The plan is consistent with the specific guidance contained in the Conference Report except for one item. In Fiscal Year 1984 the development program cannot efficiently use the entire $50,200,000 recommended by the Congress. The correct Fiscal Year 1984 funding level for the development program prepared by the Naval Weapons Center is $20,000,000. The $30,000,000 required in Fiscal Year 1985 for the development program is requested in the FY 1985 President's Budget Request under Program Elements 64302F and 25601N. Consequently, there is weak justification for reprogramming FY 1984 procurement funds to pursue the development of the low cost seeker.

THE UNDER SECRETARY OF DEFENSE
WASHINGTON D C 20301

RESEARCH AND
ENGINEERING

31 MAY 1984

(TWP)

Honorable Ted Stevens
Chairman, Subcommittee on
  Defense
Committee on Appropriations
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

This letter responds to direction contained in the Report of the Fiscal Year 1984 Defense Appropriations Conference regarding the High Speed Anti-Radiation Missile (HARM) program.

In 1983 the Department of Defense recommended the development of a low cost seeker for HARM as a cost control measure. This recommendation was accepted by Congress and specifically addressed in the Fiscal Year 1984 Appropriations Conference Report. The Conferees provided $20,000,000 for the seeker. In addition, the Conference Report directed the Department of Defense to submit a plan for the seeker development program and also directed the Department to submit a reprogramming request in the amount of $30,000,000 so that a total of $50,200,000 is available for the seeker development program.

Enclosed is a copy of the Department's plan for the recommended development program. The plan is consistent with the specific guidance contained in the Conference Report except for one item. In Fiscal Year 1984 the development program cannot efficiently use the entire $50,200,000 recommended by the Congress. The correct Fiscal Year 1984 funding level for the development program prepared by the Naval Weapons Center is $20,000,000. The $30,000,000 required in Fiscal Year 1985 for the development program is requested in the FY 1985 President's Budget Request under Program Elements 64302F and 25601N. Consequently, there is weak justification for reprogramming FY 1984 procurement funds to pursue the development of the low cost seeker.

THE UNDER SECRETARY OF DEFENSE
WASHINGTON D C 20301

RESEARCH AND
ENGINEERING

3 1 MAY 1984

(TWP)

Honorable Jamie L. Whitten
Chairman, Committee on
  Appropriations
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

This letter responds to direction contained in the Report of the Fiscal Year 1984 Defense Appropriations Conference regarding the High Speed Anti-Radiation Missile (HARM) program.

In 1983 the Department of Defense recommended the development of a low cost seeker for HARM as a cost control measure. This recommendation was accepted by Congress and specifically addressed in the Fiscal Year 1984 Appropriations Conference Report. The Conferees provided $20,000,000 for the seeker. In addition, the Conference Report directed the Department of Defense to submit a plan for the seeker development program and also directed the Department to submit a reprogramming request in the amount of $30,000,000 so that a total of $50,200,000 is available for the seeker development program.

Enclosed is a copy of the Department's plan for the recommended development program. The plan is consistent with the specific guidance contained in the Conference Report except for one item. In Fiscal Year 1984 the development program cannot efficiently use the entire $50,200,000 recommended by the Congress. The correct Fiscal Year 1984 funding level for the development program prepared by the Naval Weapons Center is $20,000,000. The $30,000,000 required in Fiscal Year 1985 for the development program is requested in the FY 1985 President's Budget Request under Program Elements 64302F and 25601N. Consequently, there is weak justification for reprogramming FY 1984 procurement funds to pursue the development of the low cost seeker.

VERY HIGH SPEED INTEGRATED CIRCUITS (VHSIC)

Dr. DeLauer, one program that all of the Services will be depending on is the tri-Service Very High Speed Integrated Circuit program. You are requesting $120 million in the Air Force R&D program to complete the first generation chips program.

QUESTION: Are all of the Phase 1 VHSIC contractors on schedule?

ANSWER: The schedule negotiated at contract award time in 1981 was for all six Phase 1 contractors to complete their chip development and system demonstration by May 1984. Only one of the six has done so. The remaining contractors will require an additional 5 to 18 months to complete. However, all of the five have fabricated and are testing Phase 1 chips, and four of the five have fabricated fully functional devices. None of the five has encountered insurmountable technical obstacles.

All VHSIC contractors have completed the critical program events required for initiation of the technology insertion efforts and sub-micrometer process development.

There is a lobbying effort on the Hill to move more rapidly into the second generation VHSIC chip program. The House Armed Services Committee added $30 million for an acceleration of the VHSIC manufacturing technology effort and to accelerate the second phase of VHSIC to begin the development of sub-micron (less than a millionth of a meter) integrated circuits.

QUESTION: Do you believe that industry is ready to accelerate the second generation chips when the first generation program has not yet been completed?

ANSWER: Yes. While considerable work remains to be done with Phase 1, including fine tuning of the fabrication process to increase yields and reduce chip costs and military qualification of the chips, all of the VHSIC contractors and several other companies have demonstrated a workable 1.25 micrometer production capability and have developed parts of the sub-micrometer fabrication process. Industry is fully capable of consolidating their Phase 1 achievements in parallel with the initial development of a sub-micrometer production capability.

QUESTION: Do you support the $30 million plus-up for VHSIC if it comes out of the hide of other R&D programs?

ANSWER: The VHSIC program is one of our most important Technology Base programs and will have a major impact on our future national security. The VHSIC products will significantly contribute to the warfighting capability in a wide variety of individual weapon systems. There are numerous opportunities available now for funding projects within the VHSIC program which will contribute significantly to savings and operational capability in the outyears. For example, we need additional effort in (1) inserting VHSIC technology into systems development, (2) enhancing the yield in our VHSIC chip manufacturing process, (3) assuring a competitive base for the 0.5 micrometer technology for military systems, and (4) providing technology support activities to the 0.5 micrometer technology development program. When viewed, however, within the constraints of the overall budget, the President's budget baseline for VHSIC in FY85 is in keeping with the remainder of our priorities.

QUESTION: Will industry be able and willing to subsidize the second generation, sub-micron chips to the same extent it subsidized the Phase 1 VHSIC program?

ANSWER: Yes. The semiconductor and military systems industries are considerably healthier now than they were at the initiation of Phase 1. The achievement of our goals for submicrometer VHSIC are equally as important to those industries and their economic health as was achievement of the Phase 1 goals.

QUESTION: Is the manufacturing technology effort required to reduce the cost of VHSIC chips?

ANSWER: The Yield Enhancement project of the VHSIC program addresses the reduction of the costs of fabricating the Phase 1 VHSIC chips. The manufacturing technology program is intended to reduce the costs which support application of the VHSIC chips, such as chip packaging, inspection, testing and qualification. Both of these efforts are required to ensure the affordability of VHSIC chips in weapons systems.

QUESTION: Will the Army's LHX program use VHSIC? Will VHSIC technology be available for LHX, given its accelerated pace?

ANSWER: The LHX program is committed to the use of VHSIC technology, and VHSIC will be ready to support the LHX full-scale development in 1986.

QUESTIONS SUBMITTED BY SENATOR RUDMAN

PENGUIN

QUESTION: Dr. DeLauer, last year Congress added $5 million for procurement of the Penguin air-to-surface missile system, an infrared missile operated by the Norwegian Navy for 10 years. Another $11.7 million in additional authorization has been provided this year.

Is this a system which should be supported? And if so, why aren't the Department and Navy requesting funding?

ANSWER: This is certainly a system that should be supported. The reason the Department of Defense did not request funding in the FY85 budget was that the ongoing study efforts which analyzed the feasibility and cost effectiveness of a helicopter launched air-to-surface missile had not been completed in time for the budget deliberations. There has been over the past two years a joint program with Norway under the Foreign Weapon Evaluation program to further develop and test seeker technology employed in the Penguin missile and surface launched tests conducted from patrol boats. A significant cost savings to the US will result from the joint program with Norway and the adaptation of an existing missile system. The Chief of Naval Operations' Executive Board has thoroughly reviewed the Penguin missile and on 24 April 1984 approved the development and procurement of the Penguin missile program for LAMPS MK III helicopter launch and for the US Coast Guard's surface-to-surface missile requirement. A reprogramming request has been initiated to transfer the $5M of procurement funds appropriated in FY84 to the RDT&E effort.

T-38 REPLACEMENT AIRCRAFT

QUESTION: When does the Air Force need to receive the initial aircraft to replace the T-38 in the advanced training role?

ANSWER: Based on current projected Undergraduate Pilot Training rates, programmed logistics modifications which will extend the useful life of the T-38, the number of aircraft in the current inventory and the introduction of Specialized Undergraduate Pilot Training in FY 1989, Air Training Command estimates the need for a T-38 replacement to occur in the FY 2000-FY 2010 time frame.

T-2 and TA-4

QUESTION: Can the T-2 and TA-4 (with proper modernization) fulfill the Navy's training requirements until replaced by a new joint service trainer?

ANSWER: No. The Navy will have insufficient T-2 and TA-4 aircraft to meet training needs by the end of the decade because of attrition. The Air Force has not identified a requirement to replace its T-38. Consequently, the earliest a replacement for the USAF T-38 might be required would be the late 1990's. By that time the Navy T-2 and TA-4 inventories would no longer support Pilot Training Rate requirements due to attrition and service life expiration regardless of modernization efforts.

Joint Service Trainer

QUESTION: Why is it not feasible for the Navy and Air Force to use the same primary and advance trainer?

ANSWER: It is feasible for the Navy and Air Force to use the same primary and advanced trainers. However, the Navy's T-34C primary trainer will not have to be replaced until after the turn of the century. Similarly, the T-38 is scheduled to satisfy the Air Force's advanced trainer requirements through the 1990's. Consequently, the DoD is directing its attention to future commonality of trainer aircraft.

VTX-TS IOC

QUESTION: If the Navy originally required new trainers by 1986 but has seen the projected IOC slip to 1991, why purchase such an old design and add weight to make it carrier-suitable?

ANSWER: The T-45 design is perfectly adequate for the Navy's needs. Undergraduate flight training requires a sound, economical airframe, not state-of-the-art technology. Any aircraft purchased by the Navy for Undergraduate Pilot Training would have to be carrier capable. There is no more weight being added to the T-45 design for carrier capability than would be required of any other design. The Navy had originally planned on a cost effective mix of T-45 carrier and non-carrier capable aircraft to do undergraduate pilot training. That two-phased program would have provided the first non-carrier capable T-45 aircraft in FY 88. The slip of the IOC to FY 91 resulted from disapproval of the two-phase program.

QUESTION: What is the nature of and rationale for our commitment to the British to buy the Hawk?

(a) What portion of the $5.5 billion program costs for the VTXTS will actually go to the United Kingdom?

ANSWER: The commitment to the British is based solely on the fact that the McDonnell Douglas design is based on the British Aerospace Hawk aircraft.

(a) The portion of program costs, now estimated at less than $5.0 billion, that will go to the United Kingdom will be based on contractual agreements between McDonnell Douglas and British Aerospace. It is estimated that British Aerospace will receive one-half of the airframe work. The remainder of the airframe, all of the avionics and all of the ground training subsystems (simulators, academics and training integration systesm) are to be procured in the U.S.

Joint Service Trainer

QUESTION: If a joint procurement of T-34's and a new joint service trainer can save over $6 billion, would it not be more cost-effective to use those funds to buy additional aircraft to modernize Air Force and Navy combat wings?

ANSWER: The DoD has no indication that any such savings are achievable. Three studies have shown that it would be more expensive for the Air Force to buy and operate the T-34C than to buy and operate the T-46 primary trainer. On the other hand the Navy does not have a requirement to replace the T-34C. With regard to advanced trainers, the Air Force does not have a requirement to replace the T-38 at this time. However, in accordance with a Navy/Air Force Memorandum of Understanding, the Navy will do nothing to the T-45 that would preclude its use as an Air Force trainer. Hence, if the Air Force developed a need for a T-38 replacement in the next few years, the USAF could procure a derivative of the T-45 as an advanced trainer.

TOMAHAWK EFFECTIVENESS

QUESTION: At $3 million a copy, is the TOMAHAWK really effective in a conventional role with only a 1,000-pound bomb?

ANSWER: The effectiveness of a weapon is based, in part, on the size of the warhead and the accuracy of delivery. Of these two factors, the latter is the more important. A cruise missile such as the TOMAHAWK Land Attack Missile/Conventional (TLAM/C), by virtue of its advanced guidance and terrain following subcomponents, promises to have a Circular Error Probable (CEP) measured [deleted.] It is therefore an ideal weapon for use against high value targets (e.g., power stations, aircraft maintenance facilities, etc.). In this role, TLAM/C would be highly cost effective, particularly if its employment were to prevent or lessen the attrition of costly attack aircraft and their crews.

SUBCOMMITTEE RECESS

[Whereupon, at 11:28 a.m., Wednesday, May 16, the subcommittee was recessed, to reconvene at the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1985

THURSDAY, MAY 24, 1984

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:05 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Rudman, Andrews, Kasten, D'Amato, Stennis, and Chiles.

DEPARTMENT OF DEFENSE

SECRETARY OF DEFENSE

STATEMENT OF THE HONORABLE CASPAR W. WEINBERGER, SECRETARY OF DEFENSE

FISCAL YEAR 1985 BUDGET REVIEW

REVISED DEFENSE BUDGET

Senator STEVENS. Forgive us for being late.

This is the time scheduled to review the fiscal year 1985 military budget with you Mr. Secretary, and General Vessey. This year we elected to schedule this appearance at the end of our hearings rather than as lead. We thought that this would permit us to hear your comments on the recent defense budget revisions that were developed as part of the deficit reduction package agreement between the congressional leadership and the White House.

BUDGET REQUEST

The revisions submitted on May 3 drop the total defense function budget request from $313.4 to $299 billion, down some $14.4 billion. For those programs funded under the Defense apporpriation bill for this subcommittee, the request of $294.7 billion is reduced by about $12.5 billion to a new total of $282.2 billion.

All of these totals include more than $3.2 billion in so-called defensewide contingencies—pay raise costs and other future requirements that have not yet been submitted to Congress as budget estimates. The totals also include a $700 million reduction reflecting offsetting receipts and other fund transactions.

The May 3 revisions, although transmitted under a letter to the Senate majority leader and signed by the President, have not been submitted to Congress as a formal budget amendment. For the record, these revisions have been printed as House Document 98-213.

Also for the record, we will insert a comparative statement of new budget authority prepared by the committee to tabulate the original budget submission. Together with that, we will include a summary of the Department of Defense budget changes that was provided as backup to the committee.

For the Defense appropriation bill itself, the revised request is an increase of $30.9 billion over appropriations to date and estimated pending supplementals for fiscal year 1984. This is a real growth of about 7.5 percent as opposed to the original budget submission estimate of about 13 percent proposed. Roughly 85 percent of the proposed budget revisions, then, apply to the bill that is before the subcommittee.

With the summary, Mr. Secretary and General Vessey, let me welcome you back before our committee. In the interest of time, we have inserted your full prepared statement in the record and ask you to proceed as you both see fit.

We are particularly interested in hearing your views on the proposed defense budget reductions and their impact on the Department's program goals and the administration's policy objectives for improving and modernizing our Armed Forces.

Senator Stennis, do you have an opening statement?

Senator STENNIS. No, Mr. Chairman, I don't have one. I will pass.

Senator STEVENS. Senator Rudman, do you have an opening statement?

Senator RUDMAN. No, thank you, Mr. Chairman.

Senator STENNIS. Mr. Secretary, you may proceed.

BUDGET HIGHLIGHTS

Secretary WEINBERGER. Thank you, Mr. Chairman and Members. We are very honored to have the opportunity to be here to present our budget for the first time to your committee.

You have summarized many of the changes very well, Mr. Chairman. I thought what I might do, with your permission, since you have already included the full statement in the record, would be to run through some highlights that are primarily concerned with why we have submitted the defense budget we did. Then, I will be glad to take your questions. General Vessey, I believe, also has a statement that he would like to make before we go into the questions.

There are a couple of points that I want to make at the outset. Neither the President nor I believe that the 1985 defense budget as submitted in February was to high. But Congress concluded that the Nation's highest priority was to reduce the deficit over the next 3 years, and the administration has reluctantly agreed to a 3-part plan that will reduce domestic spending, close tax loopholes, and reduce the defense spending by $13.9 billion, as you said.

There is no presidential recommendation, however, Mr. Chairman, to cut the defense expenditures unless and until the other two parts of that package are agreed to. It is all part of a package, and the reason that we are so reluctant to agree to these reductions is that the 1985 defense budget as submitted, as we said, was not too high. The Soviet threat has not abated, but has increased.

We continue to base it on these sobering facts about the Soviet Union, and these are entirely relevant here because this is the only basis on which we have to make up a defense budget. We can't look at it on the basis of whether it is going to contribute to a deficit. We know actually that it does not, not nearly as much as other types of spending do because it generates tax revenues and it generates jobs, although that is, of course, not the reason for doing it.

You have to make up your defense budget on the basis of the threat you face, and your strategy. Our strategy is very simple. It is to be allowed to continue to live in a world, with our friends and our allies, in peace, to be free from aggression, and to carry out the kind of quality of life that we have and to improve it. To do that, we have to see what threatens us. What threatens us is what we see on the first chart.

SOVIET NUCLEAR BUILDUP

We see enormous increases in weapons and equipment by the Soviets, a strong buildup of their strategic nuclear forces, combined with the offensive nature of their doctrine and of their military capability demonstrated by the use of it in Afghanistan directly and elsewhere, as well as their global expansion. They take advantage, of course, of Third World instabilities and they are always perfectly prepared to fish in very troubled waters.

We have seen what they had planned to do in Grenada, and we know from their equipping and backing of the Syrian forces, both with respect to material and terrorist activities, that they are perfectly capable of using their increased military strength.

So we cannot regard it as a mere sham or, as some people think, an excuse for a big defense budget, or anything of the kind. This is a fact, an unpleasant fact, but it is the world in which we live, and we will be far safer if we recognize that from the beginning.

They have introduced a number of new strategic systems as a continuing part of their process. This is a rather busy chart, but the upper-blue part shows the American intercontinental ballistic missile, and the strategic systems over the past few years, starting in 1960.

It shows the enormous development, modernization, and continued increased testing, development, and deployment of Soviet weapons. With the SS–18's and SS–19's already in place, they have done what we have been debating for 12 years: they put in their MX.

They are now working on a later model, a mobile version of the intercontinental missile. They don't show there because they are still in testing. They have been testing now for a number of years, and they are pretty close to deployment. They are also developing a new heavy bomber to go along with the BACKFIRE, and they are, of course, continuously improving their nuclear-powered submarines, as well as their submarine-launched ballistic and cruise missiles.

So you see the comparatively empty portions at the top of the chart, the blue part, which indicates the way in which we have come more or less to a halt for a number of years in any kind of modernization or improvement of our strategic systems. All of this gives them, of course, and the other things that they are developing, the ability to project their power globally.

This chart, again, shows the number of bases and air facilities, overflight rights, and other repair and docking permissions that they have in various parts of the world. Then it shows the way in which their force projects power, as well as the sea lanes of communication, in black, that we would use and we woud need to protect.

They have also made a great many foreign military sales, increases in naval port vessels, large numbers of advisers, and actual troops in many cases that they have deployed. So it is a very real, a very active, and a largely growing threat, and it was against that threat that we devised our strategy and our budget.

STRENGTHENING DETERRENCE

First of all, we have to strengthen deterrence, and we do that while at the same time we are working for arms reduction. It is always a source of frustration, I think, particularly for the President, to be told repeatedly that he has no interest in arms reduction. It is the one thing that he believes is more necessary than anything else, so that we can continue to maintain deterrence at much lower levels, and for every type of weapon.

In every forum we can, we urge genuine arms reduction. Not just the sort of agreements that allow the Soviets to expand at their rate and along the lines they wish, but genuine reductions on both sides, so that we can achieve parity and maintain deterrence at much lower levels. There must also be fully verifiable agreements.

As you know, we started out proposing a zero level for the INF systems. The people who urged the President to do that saw the proposal made, then took all of 2 weeks to start criticizing the President for being too stubborn by not withdrawing it. We have made a number of alternate proposals, a number of different ways to reach zero, and a number of different ways to negotiate. All of them have been rejected, and the Soviets have left the negotiating table.

The same is true at the START talks that address intercontinental weapons. We have changed our position 10 times, unilaterally, trying to get some kind of negotiations going and some kind of agreement for reduction. The Soviets again left the room, left the table, refused to return, and are clearly utilizing, I think, that tactic to try to demonstrate to people that as long as the President is threatening, he is not going to be able to get any kind of a negotiation. At the same time, the Soviets bitterly criticize him through their agents and others for not trying to negotiate. We have also made proposals on conventional arms in two other forums available to us.

So, while working for arms reduction, we have to maintain and strengthen our deterrence because we have fallen behind. We have not modernized. We have reduced our defense spending by 20 percent in real terms during the decade of the 1970's. Improving that means upgrading our collective defenses; it means forward basing our forces; it means security assistance. At the same time, it means we have to maintain our nuclear capability and modernize those forces. We are doing that, as you know.

TRIAD MODERNIZATION

Unfortunately, it was our task to modernize all parts of the TRIAD at once because all parts of the TRIAD needed modernization. In keeping with the Scowcroft Commission recommendation, we are proceeding with a small intercontinental ballistic missile, as well as with a modern new bomber, land-based ICBM's, and the submarine launched missile, which for the first time in many years give us the increased accuracy and yield that we need to destroying the Soviet hardened missile.

STRATEGY OF DETERRENCE

All of this is to simply carry out a basic strategy of deterrence, by convincing any potential adversary that the cost of aggression is too high to justify an attack. It is a defensive strategy that requires we have modern weapon systems, that we be ready, and that we have the sustainability accretes to our deterrence.

Deterrence is a difficult strategy because we have to figure out what would deter the Soviets. We have to get inside their minds. We have to look at what their expansion has been. That is why at any hearing on our budget we must start with the nature of the Soviet threat, the nature of their increases, the rate of their increases, and the fact that there has been no reduction on the Soviets' part for over 23 years.

We did propose substantial increases in early February of this year, when the budget was submitted. It was for an increase of 13 percent, to make up for past neglect, and to emphasize the point that however far we have come in 3½ years, we still have a long way to go.

MANAGEMENT IMPROVEMENTS

We also have put into operation a number of management improvements and other changes to make sure that we are getting the most defense for the dollar.

We have emphasized the need to have continued improvement in firepower, mobility, and survivability of all of our forces; new strategic defense technologies; increased Active and Selected Reserve end strength; improved material readiness and sustainability; and increased flying hours. We feel all these things are necessary, and that is why the original budget came out to the figure that it did.

We also said that if 13 percent real growth were approved, then we would be able in subsequent budgets to slow down. By the end of the decade, we could run along at or under 3 percent real growth and maintain the degree of deterrence we need.

We did not get the readiness or sustainability appropriations that we needed in fiscal year 1984, and the country's cry for reducing the overall deficit led to the agreement for a reduction of some $14.4 billion in the overall functions.

Those changes were made by us, and reported to the Congress, on the conditional basis that the compromise of the President would be adopted since the purpose of the changes is to reduce the deficit. If only the defense budget is going to be reduced, and our security thereby somewhat worsened, there would not be any recommendation that the President would want to make.

Actually, the reduction we made was far more than $13.9 billion because the original request that came in to us from the Services before the budget was submitted in February was $321 billion, and we took $16.6 billion out before we even submittted it to Congress. Then we took the additional $13.9 billion.

So we have reduced the defense budget a total of some $30 billion from the validated needs of the Services. We are not here with any kind of great extravagance, and we are not here with anything that we do not believe is urgently needed in view of the threat we face.

BREAKDOWN OF CHANGES

The next chart shows the breakdown of the changes that were made. Military personnel is down some $600 million; O&M is down $250 million; procurement is down $8.5 billion; research is down $800 million; family housing and military construction is down $1.5 billion. This is a breakdown of the $13.9 billion so that you can see the ways we have made the reductions that the President accepted.

This is a breakdown by services that shows the decreases made to reach the $13.9 billion.

The general guidelines that we used for doing that were, first, to maintain a balanced program by making reductions across a broad range of appropriations and activities. Second, we attempted to keep the core elements of our strategic modernization and protect it because we know how long it takes to get these programs in effect, and we know how much longer and how much more expensive it will be if we slow them down. We don't believe that we can afford to deal with the Soviet activities with any weakening of our strategic deterrence.

READINESS AND SUSTAINABILITY GOALS

The third principle we used was to maintain our readiness and sustainability goals. But we had to slow the rate at which they were being achieved. This is unfortunate in that it adds to the costs, but, again, this is the only way in which it can be done. Fourth, we slowed the rate at which some new equipment could be introduced by stretching out some programs and canceling others. That makes them more expensive, and delays the time when we have the equipment we need.

Fifth, we tried our best not to have a negative effect on military personnel. People are our best resource, and one of the areas in which we have the best results, and one of the areas in which it is most necessary to have the best results. Without trained people with high morale and high motivation, you can't take advantage of any other types of expenditures.

ADDITIONAL PROGRAM REDUCTIONS

These reductions will lower defense spending in the midterm. They will contribute to additional debt reduction. But these savings can only be realized by increasing future costs and by increasing the risks to our goals through the delay of achieving the necessary military strength.

These are some of the specific reductions that comprise the $13.9 billion reduction. We will have 120 fewer tanks than we originally requested, 55 fewer Bradley fighting vehicles, 140 fewer Patriot missiles, 32 fewer helicopters, fewer F-16's and F-18's, and so on. You can see all of those figures and the outlays that are represented by these program reductions.

Again, we did not want to make these reductions, and none of them are desirable. But in the interest of serving the highest priority noted by the Congress, and to reduce the deficit, they are presented to you on the conditional basis that the other parts of the President's program are also accepted.

ACCOMPLISHMENTS

The next chart shows some of our accomplishments. These accomplishments are real. As General Vessey has said, "By every measure of commonsense, all of the forces are far more ready and far better trained, far better equipped for any eventuality." That is precisely the goal we must have in mind in this kind of a world.

We have improved our mobility, our airlift and sealift, our conventional ground and tactical air forces, and our naval forces. This is not to say we are finished by any means, but it is to say that we have made an excellent start. The slowdowns required by the changes made this morning will hamper the process and delay it, and make it cost more, and thereby increase the danger during this gap before we can begin the necessary military deterrent.

PERSONNEL PROGRAMS

I must point out, again, that the happiest story we have is the personnel story. Recruitment and retention have improved, and the quality of the people coming in, measured by their educational achievement and their AFQT categories. These accomplishments are sources of great gratification. That is why we want so much to keep the pay raise recommendations intact, the 5.5-percent increase, because, as you know, we did not match private sector wage growth last year.

MX MISSILE

With respect to the MX peacekeeper missile, we have completed four tests now. We are very pleased to report that the accuracy of the new missile is far better than the specifications.

We made no adjustment in the MX funding in our May revision because, as we said, we wanted to keep intact the strategic modernization that we have to do. This is in view of the fact that the Soviets are already testing and deploying their fifth and sixth generation ICBM's and we have yet to deploy our third.

Should there be a reduction in the vitally needed MX program, then I would strongly urge that the funds that are saved by that reduction—although we would urge strongly that it not be done—be applied to other high priority readiness and sustainability programs. We would be glad to outline some of those for you if that were the decision of the committee.

MANAGEMENT IMPROVEMENTS

I spoke of management improvements. We have done a number of things in this area. We have an Inspector General for the Department. We have a 10-point spare parts program that reaches the problems we found during our own audits of the much too high prices for spare parts. We have an acquisition improvement program which is based upon program stability and multiyear procurement.

We have brought the service Secretaries, the Joint Chiefs, the Commander-in-Chief into the entire decisionmaking process. We think that it is a very substantial set of improvements, things that enable us to get far more out of our defense funds than we have had in the past. These are a few of the things that we have tried to do.

Mr. Chairman, when the budget was presented in February, not to your committee but to others, I emphasized that any failure to sustain, in this critical budget year, the defense revitalization program now underway, would inevitably dilute some of the gains we have made during the past 3 years. It will cause delays, stretch outs, terminations, and add to the cost without adding to our strength. But, because of the congressional feeling that our Nation's most important priority is to reduce the deficits, we have gone along with that. But we believe we owe it to you to point out that will have an adverse effect on the necessary rearming of America in this kind of world.

Thank you very much, Mr. Chairman.

[The prepared statement of Secretary Weinberger follows:]

STATEMENT OF THE SECRETARY OF DEFENSE, CASPAR W. WEINBERGER
FY 1985 DEFENSE BUDGET:

INTRODUCTION

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

THANK YOU FOR THE OPPORTUNITY TO DISCUSS THE FY 1985 DEFENSE PROGRAM. I WILL PRESENT A GENERAL OVERVIEW OF THE PRESIDENT'S FY 1985 DEFENSE BUDGET, INCLUDING HIGHLIGHTS OF THE MAY REVISIONS, WHICH ARE A PART OF THE PRESIDENT'S DEFICIT REDUCTION PLAN AGREED TO BY THE SENATE LEADERSHIP. BUT FIRST I WOULD LIKE TO RELATE THE DEFENSE BUDGET TO THE THREAT TO OUR NATIONAL SECURITY AND OUR STRATEGY TO MEET THAT THREAT, AND THEN SUMMARIZE MANAGEMENT IMPROVEMENTS, REFORMS AND ACCOMPLISHMENTS IMPLEMENTED BY THIS ADMINISTRATION. FINALLY, I WILL DISCUSS THE GROWTH IN THE DEFENSE BUDGET SINCE 1981 AND LOOK AT PROSPECTS FOR THE FUTURE.

IN EARLY FEBRUARY OF THIS YEAR, I APPEARED BEFORE BOTH THE HOUSE AND SENATE ARMED SERVICES COMMITTEES TO PRESENT THE ADMINISTRATION'S DEFENSE PROGRAM FOR FY 1985. AT THAT TIME, I REVIEWED THE THREATS TO OUR NATIONAL SECURITY AND THE PROGRAMS WE RECOMMENDED TO RESPOND TO THOSE THREATS. I PROPOSED TO CONTINUE THE EFFORT JOINTLY UNDERTAKEN BY CONGRESS AND THE ADMINISTRATION OVER THE PAST FOUR YEARS, TO REBUILD AMERICA'S DEFENSES AFTER A DECADE OF NEGLECT. I DESCRIBED THE SIGNIFICANT IMPROVEMENTS THAT HAVE BEEN MADE IN OUR DEFENSE POSTURE AS A RESULT OF THE BUDGETS ADOPTED SINCE 1980 - IN THE PRESIDENT'S STRATEGIC MODERNIZATION PROGRAM; IN THE QUALITY OF OUR PERSONNEL; IN THE READINESS AND SUSTAINABILITY OF OUR FORCES; AND IN THE MODERNIZATION OF OUR CONVENTIONAL FORCES. I PROPOSED, ON BEHALF OF THE ADMINISTRATION, A SUBSTANTIAL INCREASE IN THE DEFENSE BUDGET FOR FY 1985 OVER THE PREVIOUS YEAR TO BUILD ON THESE IMPROVEMENTS AND TO MAKE UP FOR THE REDUCTIONS VOTED BY THE CONGRESS FOR FY 1984. SUCH AN INCREASE, I SAID, WOULD PERMIT US MOST QUICKLY TO REGAIN OUR STRENGTH, TO CONTINUE OUR PROCUREMENT PROGRAMS AT ECONOMIC RATES, AND TO ATTRACT AND FAIRLY COMPENSATE THE HIGH QUALITY MEN AND WOMEN WE NEED IN MILITARY SERVICE. I ANTICIPATED THAT, IF CONGRESS ADOPTED THE BUDGET AS PROPOSED FOR 1985, THEN SMALLER INCREASES IN THE DEFENSE BUDGET WOULD BE POSSIBLE IN FUTURE YEARS.

SINCE THE BUDGET WAS PRESENTED IN FEBRUARY, THERE HAS BEEN NO CHANGE IN THE ADMINISTRATION'S FOREIGN POLICY OR NATIONAL

SECURITY OBJECTIVES. NEITHER HAS THERE BEEN A CHANGE IN OUR MILITARY REQUIREMENTS, NOR A LESSENING OF THE MILITARY THREAT.

THERE HAVE HOWEVER BEEN DISCUSSIONS BETWEEN THE ADMINISTRATION AND THE CONGRESSIONAL LEADERSHIP THAT LED TO THE DECISION TO LOWER PROJECTED FEDERAL DEFICITS OVER THE NEXT THREE YEARS BY $150 BILLION. THIS WAS TO BE ACCOMPLISHED BY REDUCING DOMESTIC SPENDING, CLOSING TAX LOOPHOLES, AND REDUCING DEFENSE SPENDING BY $13.9 BILLION. IT IS IMPORTANT TO NOTE THAT THIS THREE PART PACKAGE WAS INDEED A PACKAGE AND THERE IS NO PRESIDENTIAL RECOMMENDATION TO CUT DEFENSE EXPENDITURES UNLESS AND UNTIL THE OTHER TWO PARTS OF THE PACKAGE ARE AGREED TO. BECAUSE THE LEVEL OF DEFENSE BUDGETS SHOULD BE DETERMINED FROM THE THREAT WE FACE AND NOT BY SHIFTS IN FISCAL POLICY, NEITHER THE PRESIDENT NOR I WANT TO MAKE THESE REDUCTIONS. HOWEVER, THE CONGRESS HAS CONCLUDED THAT THE HIGHEST PRIORITY IS TO REDUCE THE DEFICITS AND THE PRESIDENT HAS THEREFORE AGREED TO THIS REDUCTION IN DEFENSE SPENDING IF, BUT ONLY IF, THE OTHER TWO PARTS OF HIS PACKAGE ARE APPROVED.

AT THE TIME THE PRESIDENT'S DEFICIT REDUCTION PLAN WAS PROPOSED TO THE CONGRESS, IT WAS CLEARLY UNDERSTOOD THAT THE REVISED FY 1985 DEFENSE BUDGET REQUEST OF $291.1 BILLION IN BUDGET AUTHORITY WOULD CONTINUE TO INCLUDE THE FULL AMOUNT ORIGINALLY REQUESTED IN FEBRUARY BY THE PRESIDENT FOR STRATEGIC MODERNIZATION. SINCE THAT TIME, THERE HAS BEEN A MOVE IN THE CONGRESS TO REDUCE THE MX PROCUREMENT FROM FORTY MISSILES IN FY 1985 TO FIFTEEN. WHILE WE ARE UNHAPPY WITH SUCH A REDUCTION, SHOULD THIS ACTION ULTIMATELY BE TAKEN, I WOULD STRONGLY URGE THAT THESE FUNDS BE USED INSTEAD TO FUND AS MANY OF THE HIGH PRIORITY PROGRAMS THAT WE MOST RELUCTANTLY IDENTIFIED IN EARLY MAY AS SUBJECT TO REDUCTION IN THE NAME OF FURTHER FISCAL CONSTRAINT. I WOULD BE VERY HAPPY TO IDENTIFY FOR THE COMMITTEE THESE PROGRAMS THAT SHOULD BE RESTORED SHOULD THE CONGRESS REDUCE THE MX PROGRAM AND THEREBY CREATE AN OPPORTUNITY TO RESTORE SUCH PROGRAMS.

THE THREAT

THE REASON THE PRESIDENT AND I ARE SO RELUCTANT TO AGREE TO THESE REDUCTIONS IS THAT THE 1985 DEFENSE BUDGET AS SUBMITTED WAS NOT TOO HIGH, AND THE SOVIET THREAT HAS NOT ABATED, BUT HAS INCREASED. WE CONTINUE TO FACE THREE SOBERING FACTS ABOUT THE SOVIET UNION.

THE SOVIET MILITARY BUILDUP, BOTH QUANTITATIVE AND QUALITATIVE, HAS PRODUCED A MAJOR SHIFT IN THE NUCLEAR AND CONVENTIONAL BALANCE.

SOVIET MILITARY POSTURE HAS BECOME INCREASINGLY OFFENSIVE IN ORIENTATION. THEIR WEAPON SYSTEMS, TACTICS AND TRAINING, CHEMICAL WARFARE OPERATIONS, AND ORGANIZATIONAL CHANGES GIVE THEM GREATER CAPABILITY TO CARRY OUT AN OFFENSIVE STRATEGY.

THE SOVIETS HAVE EXPANDED THE GLOBAL REACH OF THEIR MILITARY FORCES, ENHANCING THEIR ABILITY TO PROJECT INFLUENCE AND POWER, ESPECIALLY IN THE THIRD WORLD. LARGER NUMBERS OF ADVISORS, EXPANDED FOREIGN MILITARY SALES, AND INCREASES IN NAVAL PORT VISITS, ALL POINT TO GREATER SOVIET MILITARY INVOLVEMENT THROUGHOUT THE WORLD. FURTHERMORE, SOVIET VIOLATIONS OF SEVERAL ARMS CONTROL AGREEMENTS -- SUCH AS THE BIOLOGICAL WEAPONS CONVENTION AND THE ABM TREATY -- DEMONSTRATE HOW DIFFICULT IT IS TO ENSURE THAT THE SOVIET UNION WILL COMPLY WITH ITS COMMITMENTS. EFFECTIVE VERIFICATION MEASURES ARE ESSENTIAL, BUT -- AS WE HAVE NOW DISCOVERED -- THEY ARE NOT SUFFICIENT TO MAKE ARMS CONTROL SUCCEED.

THE SOVIETS HAVE NOT ONLY ACCUMULATED ENORMOUS MILITARY POWER, THEY HAVE ALSO DEMONSTRATED THEIR WILLINGNESS TO USE THAT POWER TO ACHIEVE THEIR POLITICAL ENDS.

STRATEGY TO MEET THE THREAT

FOR THE UNITED STATES, BY CONTRAST, MILITARY STRENGTH WILL NEVER BE AN END IN ITSELF; NOR WILL MILITARY STRENGTH ALONE GIVE US THE MEANS TO ACHIEVE OUR ENDS. THE FREEDOM AND PROSPERITY WE SEEK FOR OURSELVES AND ALL NATIONS CANNOT BE CREATED OR IMPOSED BY FORCE -- ALTHOUGH THEY CAN BE DESTROYED BY FORCE.

THE CORNERSTONE OF OUR STRATEGY, THEREFORE, REMAINS DETERRENCE, THAT IS, CONVINCING ANY POTENTIAL ADVERSARY THAT THE COST OF AGGRESSION WOULD BE TOO HIGH TO JUSTIFY AN ATTACK. OUR STRATEGY IS DEFENSIVE IN ORIENTATION BUT IF DETERRENCE SHOULD FAIL, WE MUST BE WILLING TO FIGHT TO RESTORE PEACE ON FAVORABLE TERMS.

IN IMPLEMENTING THIS STRATEGY, WE NEED A REALISTIC VIEW OF THE THREATS WE FACE. BUT LET US ALSO RECOGNIZE THAT WE HAVE GREAT STRENGTHS THAT OUR ADVERSARIES CANNOT DRAW UPON. OUR ALLIANCES ARE MORE COHESIVE, SINCE OUR ALLIES JOIN US WILLINGLY, WHILE THE

Soviet Union guarantees loyalty by menacing its "friends." Our troops are more highly motivated, for our forces defend freedoms the Soviet Union and its allies deny to their own citizens. Free enterprise and innovation have given our military forces a technological edge. And finally, with a flexible strategy we can effectively deter aggression in many areas without having to maintain significant levels of forces in all of them simultaneously.

But we cannot depend on the strength of our friends and allies if we are not willing to maintain our own defense effort, or our commitment to joint ventures and security assistance. And, to help many of our friends to help themselves, we have to provide assistance. In many parts of the world, security assistance programs are the most effective way of strengthening our own security.

We cannot rely on the superior quality of our men and women in uniform if we are not willing to give them the compensation they deserve, or the tools they need to do their jobs. We cannot assume that we will keep a technological edge unless we continue developing and modernizing our equipment and halt the vast flow of technology to the Soviet Union. We cannot retain the benefits of flexibility without training and equipping our forces to respond to different contingencies. Above all, we cannot escape the responsibility of retaining forces of sufficient size and quality to make our deterrent credible at all levels of conflict.

Unfortunately, during the 1970s the United States neglected those strengths at the very time that the Soviets were compensating for their own weaknesses. While the Soviets were continuing to widen the quantitative gap in weapons, they were also devoting an increasing portion of their military spending to research and development and procurement to achieve a qualitative improvement in their military hardware.

DEFENSE AND THE DEFICIT

I said at the outset that there have been no changes in the threat, our strategy to meet the threat, or in our international commitments, and there certainly is no feeling by the President or by me that our 1985 budget as submitted in February is too high. But I also noted that in the course of discussions between the Administration and the congressional leadership during February and March, that Congress felt the budget deficits

PROJECTED FOR THE NEXT SEVERAL YEARS HAD TO BE REDUCED. CHANGES IN ALL COMPONENTS OF THE BUDGET - REVENUES, DOMESTIC SPENDING PROGRAMS, AND DEFENSE - WERE NECESSARY IF THIS WERE TO BE DONE.

THE PRESIDENT ANNOUNCED ON MARCH 15, HIS WILLINGNESS TO SEEK BIPARTISAN AGREEMENT TO REDUCE FEDERAL DEFICITS BY $150 BILLION OVER THE NEXT THREE YEARS. HOWEVER, AS I HAVE SAID, THE PRESIDENT SUBMITTED THESE FY 1985 DEFENSE BUDGET REVISIONS ONLY ON THE CONDITION THAT THE OTHER TWO MAJOR COMPONENTS OF HIS DEFICIT REDUCTION PACKAGE, I.E., CUTS IN NONDEFENSE SPENDING, AND INCREASES IN FEDERAL REVENUES BE SPECIFICALLY APPROVED BY THE CONGRESS AS WELL. THIS INCLUDES REDUCING THE FY 1985 DEFENSE BUDGET REQUEST BY AN ADDITIONAL $14.4 BILLION. IN KEEPING WITH THE PRESIDENT'S AGREEMENT WITH THE SENATE MAJORITY LEADERSHIP, WE HAVE UNDERTAKEN THE DIFFICULT TASK OF REDUCING THE FY 1985 DEFENSE REQUEST TO THE SUGGESTED FIGURES AS FOLLOWS:

National Defense Function (050)
FY 1985
($ in Billions)

	B/A	Outlays
January 1984 Request:		
DoD (051)	305.0	264.4
National Defense (050)	313.4	272.0
May 1984 Revision:		
DoD (051)	-13.9	-5.8
Other National Defense	-0.5	-0.2
Total National Defense (050)	-14.4	-6.0
Revised Estimate:		
DoD (051)	291.1	258.6
National Defense (050)	299.0	266.0

THESE FY 1985 DEFENSE REVISIONS WERE DEVELOPED THROUGH AN INTERNAL DOD BUDGET REVIEW COMMITTEE, CHAIRED BY THE DEPUTY SECRETARY OF DEFENSE. THE PROCESS STARTED WITH PROPOSALS SUBMITTED BY THE MILITARY DEPARTMENTS, FOLLOWED BY CAREFUL EVALUATION WITHIN THE OFFICE OF THE SECRETARY OF DEFENSE.

PROPOSED DEFENSE REDUCTIONS

THE PROPOSED DEFENSE REDUCTIONS WERE ACHIEVED BY RECOGNIZING THAT THEY REQUIRE BOTH ADDITIONAL SPENDING ULTIMATELY FOR THE SAME ITEMS AND SOME INCREASE IN MILITARY RISK. THE ORIGINAL BUDGET SUBMITTED BY THE DEPARTMENT SIMPLY DID NOT CONTAIN SPENDING PROPOSALS THAT CAN BE ELIMINATED WITHOUT ADVERSELY AFFECTING OUR MILITARY CAPABILITIES AS SOME OF OUR CRITICS SEEMED

TO THINK. THE REDUCTIONS WE NOW PROPOSE ATTEMPT TO MINIMIZE THOSE ADVERSE EFFECTS; THEY DO NOT ELIMINATE THEM; THEY DO MEET THE PRESIDENT'S COMMITMENTS.

THE GENERAL GUIDELINES WE USED ARE AS FOLLOWS:

FIRST, TO MAINTAIN A BALANCED PROGRAM, REDUCTIONS WERE REQUIRED ACROSS A BROAD RANGE OF APPROPRIATIONS AND ACTIVITIES. THIS WAS NECESSARY IN ORDER TO PREVENT ANY VITAL LINK IN THE DEFENSE BUILDUP FROM BEING REDUCED TO SUCH A POINT THAT THERE WOULD BE AN UNACCEPTABLE RISK TO OUR MILITARY CAPABILITIES.

SECOND, THE CORE ELEMENTS OF OUR STRATEGIC MODERNIZATION PROGRAM WERE PROTECTED AGAINST MAJOR REDUCTIONS; IN A PERIOD WHEN AN IMBALANCE IN CONVENTIONAL FORCES PERSISTS, WE CANNOT AFFORD ANY WEAKENING OF OUR STRATEGIC DETERRENT.

THIRD, WE MAINTAINED OUR READINESS AND SUSTAINABILITY GOALS, BUT SLOWED DOWN THE RATE AT WHICH THEY WILL BE ACHIEVED.

FOURTH, WE SLOWED DOWN THE RATE AT WHICH NEW ITEMS OF EQUIPMENT COULD BE INTRODUCED INTO THE FORCE. THIS WAS DONE PRINCIPALLY BY STRETCHING SOME PROGRAMS AND CANCELLING OTHERS. AS A RESULT THERE WILL BE FUTURE INCREASES IN UNIT COST DUE TO THE SLOWER RATES OF PURCHASE AND PRODUCTION.

FIFTH, A CONCERTED EFFORT HAS BEEN MADE TO AVOID NEGATING RECENT GAINS THAT HAVE BEEN MADE IN THE MILITARY PERSONNEL AREA, WHICH IS ONE OF THE MOST SIGNIFICANT ASPECTS OF OUR MILITARY POSTURE. THIS ADMINISTRATION AND THE CONGRESS HAVE BEEN COMMITTED TO PROVIDING COMPENSATION IMPROVEMENTS TO OUR MILITARY PERSONNEL FOR THE SACRIFICES THEY MAKE IN SERVING OUR COUNTRY. THE REBUILDING OF OUR DEFENSE POSTURE IS NOT A VIABLE OPTION WITHOUT THE QUALITY AND STRENGTH OF OUR SERVICEMEMBERS.

IN SUM, THESE REDUCTIONS WILL LOWER DEFENSE SPENDING IN THE NEAR-TERM AND CONTRIBUTE A MODEST AMOUNT TO ADDITIONAL FISCAL CONSTRAINT AS PART OF THE OVERALL DEFICIT REDUCTION PLAN, BUT WITH THE ADDED COST OF LOST OPPORTUNITY FOR FUTURE SAVINGS AND WITH THE INCREASE OF RISK ENTAILED IN DELAYING NECESSARY MILITARY STRENGTH.

THIS ADMINISTRATION HAS NOT BEEN ALONE IN FACING THIS DILEMMA. VIRTUALLY ANY SERIOUS ATTEMPT TO REDUCE SPECIFIC PROGRAMS FROM THE FY 1985 DEFENSE BUDGET RATHER THAN SIMPLY GENERALIZING ABOUT THE OVERALL TOTAL HAS HAD TO COME TO TERMS WITH IT. PRESENT

SAVINGS, IT BEARS REPEATING, CAN ONLY BE REALIZED BY INCREASING FUTURE COSTS OR RISKS. NEXT I WOULD LIKE TO ADDRESS THOSE PROGRAMS THAT WE HAVE IDENTIFIED.

SUMMARY OF PROGRAMS AFFECTED

AIR FORCE ACTIVE END STRENGTH WILL BE REDUCED BY 7,000 SPACES AND PLANNED STRENGTH GROWTH WILL BE LIMITED TO 8,700 SPACES.

PLANNED GROWTH IN ARMY RESERVE PAID DRILL STRENGTH AND FULL-TIME STRENGTH WILL BE REDUCED BY ABOUT 2,000 AND 3,000 SPACES RESPECTIVELY. PLANNED GROWTH IN NATIONAL GUARD PAID DRILL STRENGTH AND FULL-TIME STRENGTH ALSO WILL BE REDUCED BY 3,900 AND 5,000 SPACES, RESPECTIVELY. THE COMBINED EFFECT OF THESE REDUCTIONS AND LIMITATIONS WILL PRODUCE SAVINGS OF ABOUT $195 MILLION. WHILE THESE REDUCTIONS DO NOT CHANGE OUR NECESSARY POLICY FOR AN EXPANDING ROLE FOR RESERVE FORCES, THEY WILL CLEARLY DELAY US IN ACHIEVING THIS GOAL. NECESSARY TASKS WILL BE ACCOMPLISHED LESS EFFICIENTLY BY USING DRILLING RESERVISTS RATHER THAN FULL-TIME PERSONNEL.

SELECTED COMPENSATION AND BONUS REDUCTIONS WILL NOT LOWER OUR COMMITMENT TO BASIC RECRUITMENT AND RETENTION OBJECTIVES, BUT WILL MAKE THE ACHIEVEMENT OF THOSE OBJECTIVES MORE DIFFICULT IN THE NEAR TERM. REDUCTIONS IN THE NUMBER OF PAYMENTS AND LOWER LEVELS OF SELECTED ARMY REENLISTMENT BONUSES WILL ACHIEVE SAVINGS OF $15 MILLION. HOWEVER, THESE REDUCTIONS CAN BE EXPECTED TO HAVE A NEGATIVE IMPACT BY REDUCING EXTENSION AND REENLISTMENT RATES. AS A RESULT, SOME SKILLED MANPOWER WILL BE LOST, AND READINESS WILL BE ADVERSELY AFFECTED. ENLISTMENT AND REENLISTMENT RATES MAY ALSO WEAKEN BECAUSE OF AN INABILITY TO REDUCE OUT-OF-POCKET COSTS TO SERVICEMEMBERS WHO ARE PERIODICALLY DIRECTED TO CHANGE DUTY STATIONS. WE WILL MAKE EVERY EFFORT TO OFFSET THE ADVERSE IMPACT OF THESE BONUS AND COMPENSATION REDUCTIONS.

IMPROVEMENTS TO THE READINESS AND SUSTAINABILITY OF OUR OPERATING FORCES HAVE BEEN A TOP PRIORITY PROGRAM IN OUR REVITALIZATION EFFORTS. EVEN THOUGH PLANNED INCREASES HAVE BEEN CONSISTENTLY REDUCED IN THE NAME OF FISCAL CONSTRAINT, WE HAVE BEEN ABLE TO RESTORE FORCE READINESS TO ACCEPTABLE LEVELS AND TO INCREASE GREATLY THE SUSTAINABILITY OF THOSE FORCES SHOULD THEY BE COMMITTED TO BATTLE. WHAT IS ENDANGERED NOW BY FURTHER REDUCTIONS IS THE PACE OF VITALLY NEEDED CONTINUED IMPROVEMENTS.

Flying hours will be decreased for the Navy and the Air Force, saving a combined $97.4 million in FY 1985. These reductions will be implemented in such a way so as to maintain FY 1984 tempos.

Growth in base operations will be restrained as will other base operating support programs principally aimed at improving the living and working environment of our personnel. Reductions to real property maintenance and repair will force deferral of all but the most essential repair projects. Backlogs in depot maintenance will be about what they were projected to be in FY 1984. They will not be reduced as we had planned and their impact will still be significant. This will decrease support of peacetime operations which, in turn, influences our ability to prepare for combat operations. Potentially more cost effective engineering and technical services to provide enhanced weapon capabilities will be deferred. Two more ship overhauls will be deferred, resulting in a total overhaul backlog of four ships.

In the procurement area, reductions will slow down the rate at which new weapon systems will be deployed. This will be accomplished primarily by stretching ongoing programs and will result in less efficient production rates and higher unit costs. Aircraft programs reduced include the F-15, F-16, C-5B, KC-135 Reengining, and F-18. Major land force acquisition that will be reduced are: M1 Tanks; Bradley Fighting Vehicles; PATRIOT fire units; AH-64 helicopters; and TOW-2 missiles. Reductions are also proposed in general support programs such as ammunition, replenishment spares, vehicles, and communications and electronic equipment. Two major programs are substantially restructured (HH-60D and AMRAAM). Program cancellations include: MK-60 CAPTOR Mine; UC-12 and C-19A aircraft programs, and the deactivation of a ROLAND battalion.

In the R&D area, the President's strategic initiatives have been retained at the levels of the original budget request. Some reductions have been made to other strategic and tactical programs but we have preserved most of our FY 1985 major R&D thrusts since this is where our high leverage, force multiplier systems of the future are being developed. It is not prudent to cancel or defer future force capabilities when we have strong evidence that the Soviet bloc is making real progress in the quality of weapons soon to be deployed by their forces.

OUR ORIGINAL FY 1985 MILITARY CONSTRUCTION AND FAMILY HOUSING PROGRAMS WERE BASED ON PRESENT AND FUTURE FORCE DEPLOYMENTS, THE NEED TO IMPROVE THE POOR CONDITION OF MANY EXISTING FACILITIES, THE NEED TO SUPPORT THE MANY NEW WEAPON SYSTEMS COMING INTO THE FORCE, AND OUR COMMITMENT TO PROVIDE ADEQUATE LIVING AND WORKING CONDITIONS FOR OUR MILITARY PERSONNEL AND THEIR FAMILIES. THEREFORE, THE $1.2 BILLION REDUCTION IN THIS AREA, OF COURSE, WILL IMPACT ADVERSELY THE ENTIRE RANGE OF OUR REVITALIZATION OBJECTIVES. BUT WHEN REFUSAL TO SUPPORT THE PRESIDENT'S REQUEST REQUIRES A $14½ BILLION REDUCTION, IT IS QUITE CLEAR WHY EVERYTHING WILL SUFFER.

CANCELLATION OR DEFERRAL OF OPERATIONAL, MAINTENANCE, TRAINING AND SUPPORT FACILITIES WILL DEGRADE OUR CAPABILITY TO OPERATE AND ADEQUATELY MAINTAIN A VAST ARRAY OF MILITARY HARDWARE, AND TO PROVIDE THE TYPES AND LEVELS OF LOGISTICAL AND SUPPORT ACTIVITIES NEEDED TO KEEP PACE WITH FORCE MODERNIZATION INITIATIVES.

CANCELLATION OR DEFERRAL OF CONSTRUCTION FACILITIES NEEDED TO PROVIDE AN ADEQUATE LIVING AND WORKING ENVIRONMENT WILL RESULT IN POOR MORALE, LOWER PRODUCTIVITY, AND HIGHER PERSONNEL TURNOVER.

CANCELLATION OR REDUCTION OF PROJECTS TO REPLACE OBSOLETE PHYSICAL PLANT CARRIES A PENALTY IN THE FORM OF EXCESSIVE COSTS INCURRED IN OPERATING AND MAINTAINING AGED, OBSOLETE AND DYSFUNCTIONAL FACILITIES, WHICH HAVE LONG OUTLIVED THEIR USEFUL ECONOMIC LIVES.

ACCOMPLISHMENTS AND GOALS

READINESS BY THE BEGINNING OF THIS DECADE, YEARS OF UNDERFUNDING READINESS AND SUSTAINABILITY HAD LEFT OUR FORCES UNPREPARED TO RESPOND QUICKLY IN A CRISIS OR TO SUSTAIN OPERATIONS FOR VERY LONG. WE ACTED IMMEDIATELY TO RECTIFY THAT DANGEROUS SITUATION. SOME OF YOU WILL REMEMBER THAT, AS ONE OF MY FIRST ACTS THREE YEARS AGO, I CAME TO YOU AND ASKED FOR ADDITIONAL FUNDS TO REDRESS THE COMPENSATION OF OUR SERVICEMEN AND WOMEN. MANY OF YOU, RECOGNIZING THE URGENT NEED TO REVITALIZE MORALE AND READINESS THROUGHOUT THE RANKS OF OUR ARMED FORCES, ASKED THEN WHETHER WE SHOULD RETURN TO THE DRAFT IMMEDIATELY, BEFORE THE ALL-VOLUNTEER FORCE COLLAPSED COMPLETELY. BUT YOU APPROVED THE FUNDS WE REQUESTED, AND TODAY -- LESS THAN THREE YEARS LATER -- OUR ARMED FORCES HAVE UNDERGONE A DRAMATIC REVITALIZATION.

During the past year all Services met or exceeded their recruiting objectives.

The quality of those recruits is far higher; from 68 percent high school graduates in 1980 to 91 percent this past year.

Retention rose in that same period from 55 percent to 68 percent, with the Air Force and Navy having their best year for reenlistments in 1983.

And the guard and reserves share in the improvements; the selected reserves rose above one million for the first time since 1961 with accession quality improvements comparable to the active forces.

We pursue our readiness goals in the FY 1985 budget yet it will now take more time to reach them. There will be delays in our planned military force expansion rate, resulting in undermanning of support units. The basic military compensation initiatives will be retained as close as possible to the FY 1984 levels so that the gains we have made in voluntary recruiting and retention will not be lost. While aircraft flying hours will be reduced, pilot flying time will be sustained at or as close as possible to FY 1984 levels as we can keep it. Backlogs of maintenance and repair activities will now continue to plague us (if our original FY 1984 and FY 1985 figures had been kept, we would have eliminated entirely many of the backlogs), but we will reduce the most urgent of these as effectively as possible with the new figures. Deferrals of some repairs will achieve near-term budget reductions although they too will represent some loss of effectiveness to our forces, and ultimately the work we have to do will cost more.

CONVENTIONAL MODERNIZATION This Administration also had to confront a major shortfall in weapons and equipment. Much of what we did have, moreover, was aging and increasingly obsolete compared to the new Soviet hardware.

During the past three years we have embarked on a long-term program to modernize our forces for the future. Through fiscal year 1984, we have funded 2,360 M-1 Abrams tanks, 1,800 Bradley Fighting Vehicles systems and 466 light armored vehicles for our ground forces. In addition, we have procured 111 F-15 and 384 F-16 fighter aircraft for the Air Force and 78 F-14 and 231 F/A-18 aircraft for the Navy to expand our tactical air forces. And, in

1981, our deployable battle force numbered 479 ships, but by the end of fiscal year 1984, it will have grown to 525 ships.

In the February FY 1985 budget we provided for a 19.5 percent increase in investment funding to restore the momentum of our modernization program that was lost last year when the growth of our investment funding was cut drastically. We have now trimmed this request by an additional $8.5 billion.

All noncombatant programs were screened for any further possible reduction. We deferred, cancelled, and stretched out procurement production programs. This will delay and, in some instances, weaken the acquisition goals and initiatives upon which the FY 1985 budget was structured. Multiyear procurement along with several other acquisition initiatives in the department have produced significant savings. Now, reduction in the procurement area will result in less efficient production rates, higher unit costs, and more under-utilized plant capacity. Also, it will delay to later years the introduction of new weapon systems for combat units.

To improve the firepower, mobility, and survivability of our land forces we had planned to procure 710 Bradley Fighting Vehicles and 720 M-1 Abrams tanks in FY 1985. We have now reduced the procurement of Bradley Fighting Vehicles by 55 and the M-1 tank by 120.

For our Air Force, we planned to buy 48 F-15s and 150 F-16s to enable us to expand our Air Force to strengthen our forward deployed units. We have reduced the quantity of F-15's by 6 and stretchedout the F-16 program.

We had planned for the Navy's deployable battle force to reach 545 ships this year as it continues to build towards its goal of 600 ships. Budget reductions have forced us to delay funding for one SSN-688 submarine, and the conversion of a TAK resupply ship.

To support our Marines, we continue our improvement of amphibious ships. The Marines are also obtaining improved tactical mobility and firepower as we continue to purchase the CH-53E helicopter and 155mm howitzer.

Our guard and reserve forces are being modernized as well with such items as the M-1 Abrams tank, the F-16 aircraft, the F/A-18 aircraft, and the Perry-class guided missile frigate. Budget

REDUCTIONS WILL DELAY THE INTENDED FORCE EXPANSION ROLE FOR THE RESERVES.

FLEXIBILITY IS KEY TO THE EFFICIENT USE OF OUR MILITARY FORCES. THE INITIATIVES WE HAVE UNDERTAKEN WITH REGARD TO INTER-THEATRE AIRLIFT, READY RESERVE SHIPPING, ENROUTE SUPPORT OF AIRLIFT FORCES, AND PREPOSITIONED EQUIPMENT WILL ALLOW US TO DEPLOY OUR STRENGTH IN A TIMELY FASHION. THIS GIVES US THE CAPABILITY TO AVERT A CRISIS FROM TURNING INTO A WAR, OR TO HALT AGGRESSION BEFORE IT OVERCOMES OUR DEFENSES.

STRATEGIC MODERNIZATION DANGEROUS OBSOLESCENCE THREATENED ALL THREE LEGS OF OUR STRATEGIC TRIAD IN 1980, THREATENING THE STABILITY OF DETERRENCE.

OUR STRATEGIC MODERNIZATION PROGRAM IS NOW STRENGTHENING ALL THREE LEGS OF THE STRATEGIC TRIAD AS WELL AS OUR STRATEGIC COMMAND, CONTROL, AND COMMUNICATIONS SYSTEMS. FOUR TESTS OF THE MX/PEACEKEEPER HAVE NOW BEEN COMPLETED, AND WE ARE VERY PLEASED TO REPORT THAT THE ACCURACY OF THE NEW MISSILE IS THUS FAR BETTER THAN SPECIFICATIONS AND THOROUGHLY GRATIFYING. THE FY 1985 BUDGET INCLUDES FUNDS FOR PRODUCTION OF 40 MISSILES AND CONTINUED RESEARCH ON THE SMALL MISSILE.

OUR FIRST NEW STRATEGIC BOMBER IN MORE THAN THIRTY YEARS IS IN PRODUCTION, WITH 34 B-1BS PLANNED TO BE PROCURED IN THE FY 1985 BUDGET. WE ALSO HAVE REQUESTED FUNDS TO BUILD THE TWELFTH TRIDENT SUBMARINE AND FOR DEVELOPMENT OF TRIDENT II MISSILES WHICH WILL PROVIDE OUR SUBMARINE FORCE THE INCREASED PAYLOAD AND IMPROVED ACCURACY NEEDED TO ASSURE EFFECTIVE RETALIATION AGAINST HARDENED TARGETS. FINALLY, OUR C^3 SYSTEMS ARE BEING MODERNIZED AND UPGRADED.

AT PRESIDENT REAGAN'S DIRECTION WE ARE ALSO EMBARKING ON A BOLD NEW EFFORT TO EXAMINE AND ASSESS MANY DIFFERENT OPTIONS TO GIVE US A RELIABLE AND EFFECTIVE DEFENSE AGAINST INCOMING SOVIET BALLISTIC MISSILES. THIS WILL REQUIRE MANY YEARS. I BELIEVE IT IS THE MOST SIGNIFICANT STEP WE CAN TAKE TO PRESERVE PEACE WITH FREEDOM AND TO PASS ON TO OUR CHILDREN THE LEGACY OF A SAFER WORLD. IT IS, AS THE PRESIDENT HAS SAID, FAR BETTER TO PROTECT OUR PEOPLE THAN TO AVENGE THEM. WE SEEK ABOUT $1.8 BILLION IN THIS BUDGET FOR THIS PURPOSE - $250 MILLION IS NEW MONEY AND THE BALANCE WILL BE FROM ONGOING TECHNOLOGY EFFORTS IN AREAS RELEVANT TO BALLISTIC MISSILE DEFENSE. THE STRATEGIC MODERNIZATION PROGRAM, THE STRATEGIC DEFENSE INITIATIVE, AND THE DIRECT COSTS

OF OPERATING OUR STRATEGIC FORCES TOGETHER WILL STILL COMPRISE LESS THAN 15% OF THE DEFENSE BUDGET.

MANAGEMENT REFORM

AT THE SAME TIME WE WERE RESTRUCTURING OUR NATION'S DEFENSE PROGRAM, WE WERE MAKING EVERY EFFORT TO INSURE THAT THE DEFENSE DEPARTMENT WAS RUN MORE EFFICIENTLY. LIKEWISE, AS INVESTMENTS IN AMMUNITION, SPARE PARTS, AND NEW WEAPONS AND EQUIPMENT WERE CANCELLED, POSTPONED OR STRETCHED OUT, COST-EFFICIENT PRODUCTION BECAME IMPOSSIBLE. SHORTLY AFTER ARRIVING, I DISCOVERED THAT THE DEFENSE PROCUREMENT SYSTEM FAILED TO TAKE FULL ADVANTAGE OF COMPETITION, AND CONTAINED FEW INCENTIVES TO REDUCE COSTS OR IMPROVE EFFICIENCY. REFORMS INITIATED IN THE PLANNING, PROGRAMING, AND BUDGETING SYSTEM (PPBS), WERE ACHIEVED WITH REDUCED PAPERWORK REQUIREMENTS, AND INCREASED PARTICIPATION IN DEFENSE PROGRAM RESPONSIBILITY. A THOROUGH AND FORTHRIGHT AUDIT PROGRAM WAS ESTABLISHED TO IDENTIFY SOURCES OF WASTE AND INEFFICIENCY AS WAS A COMPREHENSIVE ACQUISITION IMPROVEMENT PROGRAM TO INSTILL SOUND BUSINESS PRACTICES IN DEFENSE PROCUREMENT. OUR JOINT EFFORTS WITH THE DEPARTMENT OF JUSTICE TO PROSECUTE THOSE WHO DEFRAUD THE DEFENSE DEPARTMENT ARE PAYING OFF IN RECOVERIES OF FUNDS FOR THE U.S. GOVERNMENT AND SHOULD ALSO BE A DETERRENT TO FUTURE MISCONDUCT.

I HAVE TAKEN STEPS TO END THE SPARE PARTS PRICING ABUSES WHICH WERE UNCOVERED AND REPORTED BY THE DEPARTMENT OF DEFENSE. A TEN-POINT SPARE PARTS REFORM PROGRAM PROVIDES INCENTIVES FOR EMPLOYEES TO FIND COST SAVINGS AND STERN DISCIPLINARY ACTION AGAINST THOSE WHO ALLOW ABUSES TO CONTINUE. THE MILITARY DEPARTMENTS ARE MAKING THE COMPETITION ADVOCATE PROGRAM WORK AND THEY WILL REFUSE TO PAY UNJUSTIFIED PRICE INCREASES. WE SEEK REFUNDS WHERE OVERCHARGES HAVE OCCURRED AND WILL CEASE DOING BUSINESS WITH CONTRACTORS WHO REFUSE TO MEET OUR CONTRACTING STANDARDS. FINALLY, I HAVE DIRECTED REFORMS IN OUR BASIC CONTRACT PROCEDURES AND ORDERED ADDITIONAL AUDITS AND INVESTIGATIONS. MORE IMPORTANTLY, WE HAVE INSTITUTIONALIZED THESE REFORMS SO THEY WILL CONTINUE TO WORK JUST AS WELL IN THE FUTURE.

WE HAVE INTRODUCED OTHER ECONOMIES AND EFFICIENCIES THAT HAVE NOW BECOME A PART OF THE WAY WE DO BUSINESS. THESE INITIATIVES, WHICH WILL SAVE THE TAXPAYERS ABOUT $50 BILLION, INCLUDE MULTIYEAR PROCUREMENTS, ECONOMIC PRODUCTION RATES, CANCELLATION/REDUCTION OF MARGINAL PROGRAMS, AND SPARE PARTS MANAGEMENT INITIATIVES.

SECTION 794 OF THE FY 1984 APPROPRIATIONS ACT REQUIRES WRITTEN GUARANTEES CONCERNING PERFORMANCE AND WORKMANSHIP FOR WEAPONS SYSTEMS AND THEIR COMPONENTS UNLESS A SPECIFIC WAIVER IS GRANTED IN THE INTEREST OF NATIONAL DEFENSE OR ON THE BASIS OF COST EFFECTIVENESS. I FULLY SUPPORT THE PURPOSE OF THIS LEGISLATION WHICH IS TO INSURE THAT OUR WEAPON SYSTEMS WORK AS THEY ARE INTENDED TO AT THE TIME THEY ARE NEEDED.

THE USE OF WARRANTIES IS NOT NEW TO THE DEPARTMENT OF DEFENSE. THEIR USE GOES BACK AT LEAST 20 YEARS AND THEY WERE USED ON AN INDEPENDENT BASIS BY THE INDIVIDUAL SERVICES PRIOR TO THAT. IN RECENT YEARS, THE USE OF WARRANTIES IN DOD HAS COVERED ONE-THIRD OF THE MORE THAN 4 MILLION TYPES OF ITEMS IN OUR INVENTORY. FURTHER, ALL OF OUR CONTRACTS AND PURCHASES HAVE MANDATORY INSPECTION CLAUSES WHICH PROVIDE FOR PRE-ACCEPTANCE INSPECTIONS TO DETERMINE DEFECTS IN MATERIAL, WORKMANSHIP, AND OTHER NON-CONFORMITIES TO CONTRACT SPECIFICATIONS.

WE MUST HAVE AN ORDERLY, REASONED APPROACH WHICH WE HAVE FOUND EFFECTIVE IN THE PAST. AT THE SAME TIME, WE ARE BROADENING THE USE OF PERFORMANCE GUARANTEES AND WARRANTIES TO MEET THE DESIRES OF THE CONGRESS. WE MUST BE SURE THAT THE CHARACTERISTICS OF WEAPON SYSTEMS WHICH WE REQUIRE CONTRACTORS TO GUARANTEE ARE ESSENTIAL, MEASURABLE, AND TRACEABLE. ALL OF OUR EXPERIENCE SUGGESTS THAT DETAILED ANALYSIS AND SELECTIVE APPLICATION ARE NECESSARY TO HAVE AN EFFECTIVE PRODUCT INCENTIVE PROVISION.

OUR REFORMS AND IMPROVEMENTS COMPLEMENT THE PRESIDENT'S REFORM '88 PROGRAM. AND IT IS REASSURING THAT THE GRACE COMMISSION SUPPORTS AND ENCOURAGES THE DEPARTMENT IN MANY OF OUR ACQUISITION INITIATIVES. MOST IMPORTANTLY, THEY ARE WORKING.

GROWTH IN DEFENSE BUDGETS AND FUTURE OUTLOOK:

UNFORTUNATELY, A FEW YEARS OF STRONG DEFENSE BUDGETS CANNOT MAKE UP FOR A DECADE OF NEGLECT. RESTORING -- AND THEN MAINTAINING --THE MILITARY BALANCE REQUIRES A DETERMINED AND SUSTAINED EFFORT. THE DEEP CUTS IMPOSED BY CONGRESS IN THE FY 1984 BUDGET REQUEST DISTORT THE BASE FROM WHICH AN APPARENT LARGE INCREASE IN REAL GROWTH IS REQUESTED. FOR THE FIRST FOUR FISCAL YEARS ADDRESSED BY THIS ADMINISTRATION, INCLUDING FY 1984, THE DEFENSE BUDGET, VOTED BY THE CONGRESS SHOWS AN AVERAGE REAL

ANNUAL INCREASE OF ABOUT 8 PERCENT. IF WE FAIL TO MAINTAIN THIS MOMENTUM AND STOP IN MIDCOURSE, WE WILL ONLY ENDANGER THE PROGRESS WE HAVE MADE AND INVITE SPECULATION BY FRIENDS AND ADVERSARIES ALIKE THAT THE UNITED STATES CAN SUSTAIN NEITHER ITS WILL NOR ITS LEADERSHIP.

THE INITIAL DEFENSE RECOVERY PROGRAM PLANNED BY THIS ADMINISTRATION IN 1981 ENCOMPASSED FIVE FISCAL YEARS. IF WE HAD KEPT OUR DEFENSE BUILDUP ON A STEADY COURSE AND SMOOTH GROWTH PATTERN WE WOULD BE APPROACHING THE TIME WHEN WE COULD REDUCE CONSIDERABLY THE RATE OF INCREASE. HOWEVER, WE SUFFERED A SEVERE SETBACK IN FY 1984 AND HAVE NOW REDUCED FY 1985 BELOW THE LEVEL NECESSARY TO PUT THE BUILDUP BACK ON TRACK. THESE DELAYS BOTH EXTEND THE TIME AND THE PRICE WE MUST PAY FOR OUR DEFENSE RECOVERY.

DURING THE COMING MONTHS YOU WILL CONFRONT IMPORTANT -- AND DIFFICULT -- BUDGETARY DECISIONS THAT WILL SHAPE AMERICA'S SECURITY FOR YEARS TO COME.

AT THE TIME THE FY 1985 DEFENSE BUDGET WAS PRESENTED IN EARLY FEBRUARY, I EMPHASIZED THAT ANY FAILURE TO SUSTAIN, IN THIS CRITICAL BUDGET YEAR, THE DEFENSE REVITALIZATION PROGRAM NOW UNDERWAY WOULD DILUTE THE GAINS MADE DURING THE PAST THREE YEARS BY CAUSING DELAYS, STRETCHOUTS, TERMINATIONS, AND FUTURE INCREASES IN THE COST OF RESTORING AMERICA'S DETERRENT STRENGTH, AND ADDING TO THE RISK EVERY FREE NATION FACES. NOW, BECAUSE OF THE CONGRESSIONAL FEELING THAT OUR NATION'S MOST IMPORTANT PRIORITY IS TO TRY TO MAKE SOME REDUCTION IN OUR DEFICITS, WE INVITE THIS RESULT.

JOINT CHIEFS OF STAFF

STATEMENT OF GEN. JOHN W. VESSEY, JR., CHAIRMAN OF THE JOINT CHIEFS OF STAFF

BUDGET ADJUSTMENTS

General VESSEY. Thank you very much, Mr. Chairman.

You have already said that our written statements were already in the record. I have only a few words to add to what the Secretary said.

First, I want to tell you that the Joint Chiefs of Staff participated fully in the original budget request, and we supported it as being consistent with the threats to our interests and with our strategy to meet those threats. The budget was neither massive nor excessive, but what truly is required.

Since that time, the President has agreed with the leaders of the Congress to a 3-year Federal spending reduction package. The Joint Chiefs of Staff do not advocate cutting the defense budget as originally proposed, but we have worked within the Department of Defense, during the many meetings with Secretary Weinberger and his staff, to assure that the programs, as now submitted and reduced, maintain the necessary balance to support our strategy best at the reduced levels.

When the cuts were made, the Joint Chiefs were mindful of the war fighting needs of the commanders in the field, and of the overriding need to insure deterrence both from the nuclear point of view and balancing our conventional forces. The new budget will slow or delay our plans for modernization, as well as have some impact on the readiness and sustainability, as the Secretary pointed out. We can only be less certain of our security if we decide to spend less for defense.

SOVIET ADVANCES IN WEAPONRY

It is important for us to remember that the Soviets have not stood still. There has been some debate about the rate of increase in Soviet spending, and whether or not it has slowed. It is clear that their production of war fighting equipment has continued to exceed greatly that of the West, and that their forces continue to exceed our forces and those of our allies.

They have just completed an important phase of their intercontinental ballistic missile modernization. Their conventional forces are already larger than they need, certainly, for their own defense, and they have also been modernized.

So while we have made progress, the Soviets have been unrelenting in their own buildup of large quantities of very good, very modern military equipment. We have to deal with these realities of Soviet power. We can't escape them. We understand the agreement for the cuts. The cuts are going to be made. I just want to say that the Joint Chiefs of Staff do not advocate the cuts.

We understand the reasons, but we do conclude that the reduced programs as now laid out provides the necessary balance among the land, sea, and air forces, between the conventional and nuclear forces at the reduced level of spending. The program as laid out by the Secretary has the support of the Joint Chiefs of Staff.

[The prepared statement of General Vessey follows:]

PREPARED STATEMENT OF GEN. JOHN W. VESSEY, JR.
CHAIRMAN
JOINT CHIEFS OF STAFF

Mr. Chairman and Members of the Committee:

The US military posture has improved from the low point of the 1970s. Commanders in the field report renewed confidence in their forces. The resources provided have permitted them to reverse the decline in the total force readiness and sustainability of existing forces. Moreover, these resources are a firm foundation upon which to continue to build the deterrent forces which, together with those of our allies, are necessary to protect the Nation's interests for the remainder of this century. The Congress and the Executive Branch have made this possible. And, on behalf of my colleagues on the Joint Chiefs of Staff and the men and women in uniform, I thank you for your support.

The Nation's military forces are good and substantial progress is being made in overcoming past deficiencies. Many programs are beginning to show positive effects with the operating forces. Good people are the heart of our forces, and we're filling up the shortages in skilled manpower. Recruitment and retention are excellent. New, good equipment from long-delayed modernization is now coming into the hands of our soldiers, sailors, airmen, and Marines where it counts most. Our forces are well trained and well led. In talking to military leaders of our allies and friends, I find that they, too, are reassured by the restored strength of American forces. These facts serve as an incentive for Soviet restraint, and the growth of our strength will eventually provide a climate for sensible negotiations.

However, the Nation should not be complacent, nor accept the notion that these past three years can somehow erase the decline in real growth over the 1970s or eliminate the gap caused by the continued growth of Soviet power. The Joint Chiefs of Staff have looked at the threats to our Nation's security and at our strategy. We believe this year's original budget request was sensible. It was neither massive nor excessive. It was a reasonable response to threats to national security and to the requirements of the military strategy of the United States. Reductions in the President's requested budget this past year have slowed the momentum of revitalization. The cuts to this year's budget will slow it further. This slowed rate of growth in force capabilities will affect readiness and retard responsiveness in a crisis.

The Joint Chiefs do not advocate these cuts. However, we participated fully with the Secretary of Defense in the development of the amended budget you have before you now. We participated understanding the reductions had to be developed and submitted. The threats to our interests have not changed, nor has our strategy changed; but, if the Defense Budget needs to be cut for reasons other than defense, then the way the Secretary has laid out these cuts has the support of the Joint Chiefs of Staff.

THREAT

The US military posture -- the ability to protect US interests -- is affected by many variables. Growing Western interdependence and Third World instability are dynamic influences on national security. While we were restoring our strength, the Soviets were not standing still. The momentum of the Soviet military buildup, unequalled in peacetime, will carry Soviet force expansion and modernization programs well into the 1990s. With this pace of modernization over the last ten years, the Soviets have produced three times as many aircraft and four times as many tanks and other tracked vehicles than has the United States. They also have deployed a large and powerful navy. Soviet conventional forces can dominate the Eurasian land mass, endanger our vital lines of commerce, and simultaneously threaten US and allied interests in Europe and Asia. Even a limited confrontation with the Soviet Union immediately could have global implications.

The Soviets continue to modernize their strategic nuclear forces. In 1982 alone, they deployed over 1200 highly accurate intercontinental ballistic missile warheads. They deployed another 200 ICBM warheads in 1983, which will lead to the completion of a significant phase of their strategic ICBM modernization this year. All this is taking place and we have not yet deployed a single PEACEKEEPER missile. These Soviet missiles with a total of over 5000 warheads are being placed in the world's hardest silos and are linked with a redundant, survivable, and reliable command and control network to the Soviet leadership in well-protected sites. The Soviets have also strengthened their theater nuclear forces. Even as we negotiated, they deployed SS-20s at the rate of one a week and improved their theater nuclear forces in Eastern Europe. The Soviets claimed no nuclear weapons were in East Europe and that recent deployments to Eastern Europe were in response to our deployments of PERSHING II and

GLCM. The facts are that Soviet levels of new tactical nuclear systems reflect decisions made years before we deployed PERSHING II and GLCM.

Soviet military power impedes the peaceful resolution of Third World problems and contributes to regional instability in ways that could promote wider conflict. The Soviets are not the only source of turbulence in the world. In the case of international terrorism, there are many causes and sponsors. In Central America and Lebanon, centuries of injustice, poverty and violence have led to the dangerous situations that exist today. But the Soviets seek to gain from international turmoil. Together with clients and surrogates, the Soviets are attempting to weaken the ties between the United States and its allies and to establish their own patterns of influence throughout much of the Third World.

STRATEGY

The basic national security objective for US Armed Forces is to help preserve the United States as a free nation with its fundamental institutions and values intact. This Nation and its allies seek to provide security and protect our way of life by preventing war. Our strategy is defensive; it is based on deterrence. Should deterrence fail, the strategy is to restore peace on favorable terms, and at the lowest scope and intensity of warfare consistent with our objectives.

Strategy guides the development as well as the deployment of US forces. Because of the great distances from the United States to areas of vital interests and the relative nearness of the threats to those interests, this Nation has maintained forward-deployed land, naval, and air forces since the end of World War II. These forces lend political and military strength to our alliance strategy by a visible demonstration of the strength of the US commitment -- putting potential aggressors on notice that an attack will be met immediately by allied opposition that includes the United States.

We maintain a strong, central reserve of Active and Reserve forces in the United States, ready to reinforce those forces forward-deployed with our alliances, and to protect US interests in other regions where there are no forward-deployed forces or where friends ask for help.

Because US forces will likely remain small relative to the requirements we have for them, they need to be as effective and flexible as possible. Superior training and superior equipment are required. Our forces must be fully equipped with modern equipment to give them the necessary technological edge over a numerically superior enemy. Our forces must be well-trained. Top-notch training is the decisive edge in combat effectiveness and it allows us to get the most out of our equipment.

US commanders rely on good intelligence to warn and inform the forces and on effective and survivable command and control systems to direct their most effective use. As has always been the case, superior mobility and control of the key sea lines of communication will be essential to help make this strategy work. We have come to rely increasingly on space for command and control. However, because the Soviets have fielded the world's only operational anti-satellite weapon, space can no longer be considered a sanctuary.

Our nonstrategic nuclear systems are essential to our deterrent strategy of flexible response. These systems deter Soviet aggression by countering Soviet theater nuclear systems and by providing the capability to respond at whatever level of intensity necessary to prevent the Soviets from achieving their war objectives.

Over-arching all the components of our strategy, the strategic nuclear TRIAD and its associated command and control systems provide the strategic deterrent so essential to peace. We require modern, ready, strategic nuclear forces in sufficient numbers to make it clear to the Soviets that their war objectives cannot be achieved if they resort to strategic nuclear war.

IMPLICATIONS FOR OUR FORCES

The budget supports the strategy. Much of the budget is dedicated to the shorter-term needs of the existing forces, and supports the progress of the Services in restoring the vitality of the total force. We urgently need to sustain that vitality. At the same time, the revised budget provides an effective, balanced program for modernization accompanied by modest growth in the size of our forces and appropriate R&D support, though at levels below those requested by the Joint Chiefs.

The Joint Chiefs believe the proper balance has been struck -- the balance between providing for present needs in readiness and sustainability and ensuring future capabilities through modernization. Inherent to this balanced approach is reliance on our technological base. The modernization programs are jeopardized by Soviet successes in acquiring Western technology. The Nation urgently needs to protect the technology which gives us the qualitative advantages so necessary to give our forces an edge over potential enemies.

FORCE READINESS AND SUSTAINABILITY

Improving the warfighting efficiency of existing forces to deter and, if necessary, to fight at any level, intensity, and location remains top priority. We don't know when or if war will come. The forces must be ready. The success of this Nation in battle depends critically on our ability to respond rapidly with well-trained, well-equipped, properly supported forces, and to sustain those forces. In turn, wartime readiness depends on how well the Nation performs the peacetime functions of preparing for war.

Existing forces are now more capable of executing the strategy. Under this budget the Services will continue to provide new equipment to the forward-deployed forces and to those early-deploying forces in the central reserve in the United States but at a reduced rate from that originally requested. Priority is given to those first to fight, to include the Reserve Component Forces. Many Guard and Reserve units are receiving first-line equipment -- including the M1 tank, the M2 Fighting Vehicle, the F-16 fighter, the Perry Class Guided Missile Frigate, and modern tactical communications equipment.

To tie these forces together, the Commanders in Chief of the operating forces and the Joint Chiefs are continually refining joint doctrine, combined training and exercises. A 15.7 percent increase in joint exercise funding will allow some 70 joint and combined exercises. The exercises are essential to readiness and to evaluate US strategic plans. Such joint and combined exercises have the further advantages of showing our resolve and of improving the ability of the forces from the various Services to operate effectively with US allies.

The capability of the forces of all Services to work together effectively and with forces of other countries is a major part of our coalition strategy. This strategic imperative is manifested in our unified command structure. The key players in implementing this strategy are the Commanders in Chief of the Unified and Specified Commands, the CINCs. They are our operational commanders and provide oversight of our forces, as well as the direct interface with our allies.

Accordingly, the Joint Chiefs of Staff, in cooperation with the Secretary of Defense, are actively working with the CINCs to meet their needs. This is evident in the development of joint doctrine. The CINCs now have a direct role in the development of operational concepts. The CINCs have been deeply involved in creating this budget by personally presenting their warfighting and operational needs.

The CINCs need and have asked for a source of funds to meet urgent, near-term readiness and warfighting requirements. At present, when unforeseen requirements arise, the CINCs' only recourse is to seek funding through the Services -- a lengthy process which may not be responsive. To satisfy unanticipated readiness problems, we propose a special fund. The fund would be managed by the Joint Chiefs who are in the best position to evaluate the urgency and priority of a request.

Another peacetime function essential to warfighting effectiveness is sustaining the forces. Sustainability gives our forces staying power both in peace and war. Forces that cannot be sustained can be outlasted, and deterrence gained by modernization and readiness becomes less credible. This budget will allow the Services to continue the progress they have begun. Although stockage and depot maintenance levels are programmed to increase, as are sustainability levels, the cuts have reduced the rate at which we would correct shortcomings.

SUPPORTING OUR ALLIANCE STRATEGY

We are working to encourage our friends to improve their ability to act in their own behalf or with us in the defense of common interests. In so doing, we make a contribution to our own security. In implementing our global strategy, allied host nation support and security assistance stand as two of the most cost-effective measures. For example, better security assistance terms, and larger quantities, are urgently needed right now in Central America. Effective security assistance to this troubled region will help to improve the security situation so social, political and economic reform can progress.

STRATEGIC FORCES

The United States has placed a high priority on modernizing its strategic forces. This broad effort includes making command and control systems more responsive and survivable, improving strategic warning capabilities, and improving all legs of the TRIAD. The Joint Chiefs fully support the conclusions of the Scowcroft Commission that the nuclear weapons modernization programs are essential both for deterrence and to create the climate for meaningful arms reduction negotiations. The development and deployment of the PEACEKEEPER missile, TRIDENT submarine system, B-1B and Advanced Technology Bomber, air-launched cruise missile, and a new small, single warhead ICBM are essential programs to ensure the US strategic deterrent.

This Nation has delayed strategic nuclear modernization and we are now faced with the need to modernize all three legs of the TRIAD at the same time. The Soviets have built a strategic nuclear force which they perceive as necessary to achieve their war objectives. We need a force which will make it clear to them they cannot achieve those wartime goals. The TRIDENT submarine program and the D5 missile will modernize our aging POSEIDON fleet. The PEACEKEEPER will upgrade our ICBM force to offset the imbalance caused by Soviet deployment of modern, hard-target capable ICBMs, while research proceeds on the small missile. The B-1B will provide a survivable, responsive bomber force able to penetrate Soviet defenses well into the 1990s. We need to go ahead with these programs to assure the credibility of our strategic deterrent.

A major effort to modernize our strategic command, control and communications (C^3) systems continues in this budget request. In order to assure the capability to detect and provide warning of an impending attack, sensors, command centers and their supporting communications are being hardened against nuclear effects. Our C^3 systems are being designed for increased survivability as well as redundancy and improved interoperability of key command facilities.

The Joint Chiefs support the President's initiative to have this Nation employ its technological talent to seek an alternative to sole reliance on offensive retaliation. In consultation with our allies and with the US scientific community, we are exploring means which provide the hope that we can end the dominance of offensive nuclear weaponry.

NONSTRATEGIC NUCLEAR FORCES

Nonstrategic nuclear forces are a key part of our strategy of flexible response. The modernization of our nonstrategic nuclear systems with the fielding of PERSHING II, modernized field artillery warheads, and ground-launched cruise missiles, as well as associated command and control, will improve effectiveness; reduce risks to allied territory; and improve safety and security. With the continued cooperation of NATO and the support of the Congress, the new long-range systems will serve to counter Soviet SS-20 deployments and strengthen the credibility of our deterrent posture.

CHEMICAL

The Joint Chiefs place great priority on modernizing the US retaliatory chemical munitions stockpile. US forces are improving their ability to defend against chemical attack, but the Congress must clearly understand that the lack of a modern chemical retaliatory capability will have our forces fighting at great disadvantage. Additionally, unless we take steps to modernize our own chemical munitions, we provide little incentive to the Soviets for a meaningful, verifiable arms control agreement prohibiting chemical weapons. This budget provides for long leadtime items and facilities in order to begin production in FY 86. We urgently need to move forward in the production of modern chemical munitions to make our chemical warfare deterrent credible.

NEGOTIATIONS

The Joint Chiefs fully support efforts to gain genuine, mutual, equitable and verifiable reductions in armaments. Arms control and other related negotiations are being pursued with the idea that equitable and verifiable agreements can contribute to security at reduced force levels. Arms control should not be viewed as a substitute for force modernization; rather, arms control and other defense efforts should be mutually reinforcing.

Any agreement is only as good as the willingness of the signatories to comply with the obligations assumed. Soviet violations or probable violations of provisions of several agreements presently in force show a disturbing pattern of Soviet behavior. This behavior must be taken into account in the development of US defense programs and approaches to arms control.

CONVENTIONAL FORCES

In this age of nuclear parity and with conventional and low-intensity conflicts widespread throughout the world, conventional forces are the mainstay of our force structure. In this budget, land forces are being reorganized to improve flexibility and to capitalize on the effectiveness of newly introduced weapons, such as the ABRAMS tank, BRADLEY fighting vehicle, APACHE helicopter, and Multiple-Launch Rocket System (MLRS). Improvements to and modernization of Active and Reserve Army divisions, to include the new light division concept, will enhance global flexibility. Naval forces continue to build toward a 600-ship Navy with 15 carrier battle groups, 4 battleship surface action groups, modernized attack submarines, and amphibious lift for Marine amphibious forces. We are procuring the best fighters flying today. We need to continue to procure such aircraft and modernized munitions as we build and strengthen the Air Force towards 40 tactical fighter wing equivalents. Modern, survivable, high-capacity tactical communication systems are being obtained to provide adequate, secure and reliable information distribution systems. This budget will also improve the ability of special operations forces to support the needs of the CINCs at any level of conflict.

MOBILITY

Our strategy calls for a rapid-reacting central reserve and the transportation to move it. Budget requests for the Navy and the Air Force recognize the importance of supporting the other Services in deploying their forces. Progress is being made to improve sealift and airlift: the maritime Ready Reserve Force is expanding, the purchase of KC-10As is funded, C5A improvements are underway, and conversion of fast sealift SL7s is well-along and needs to be kept going. The Army and Marine Corps have taken measures to improve the capabilities of their forces to deploy. For instance, maritime pre-positioning for the Marines and the Army's light divisions will improve their mobility. Nevertheless, the revised budget will slow C-5B procurement and KC-135 reengining.

PEOPLE

No matter how good the strategy or how excellent the equipment, good people will remain the heart of our defense forces. Well-trained, highly motivated Service members are fundamental to combat readiness. This Nation has very good people in its Armed Forces today because of the Nation's renewed pride and faith in those people and the willingness to pay the price for adequate security. The people in our Armed Forces are willing and ready to go wherever this Nation asks them to go to protect our vital interests. Their tasks are difficult and dangerous. Very much a part of their willingness and readiness to do these difficult tasks is the sure knowledge that we as a Nation will provide for their needs. The men and women in uniform need to know we will give them the best possible equipment and training for their difficult tasks, and they need to know this Nation will provide reasonable pay and compensation for them and their families.

There are a number of proposals being studied now with respect to compensation and retirement. I urge the Congress in reviewing these issues to remember the unique demands of military service. The Armed Forces need to have confidence that trends will not be set in motion that will erode pay and other benefits or return the forces to the unstable personnel picture of the 1970s. In the case of retirement, it is not a pension system; it is an integral part of a lifetime, career compensation program. It is a means to shape the age and skill mix of the force. The military profession is still a young person's calling and the retirement system for the Active and the Reserve Forces must account for that.

CONCLUSION

As the Congress considers the Defense Budget this year, I urge the members to remember that crises too often give little warning of their approach. Orderly preparation is not possible once growing tensions indicate immediate danger. An Army, Navy, Air Force and Marine Corps -- in being and constantly maintained in readiness -- support the other elements of our national power, give weight to diplomacy, and deter aggression.

The Soviets will not stand still. They will continue on the path they have begun, fielding increasingly capable forces on the land, on the sea, in the air, and in space. Our Nation has no plans to match the Soviets weapon for weapon, and the Joint Chiefs do not suggest a neglect of the other elements of our national power. However, this Nation simply must do what's needed to be done to counter the Soviets with forces which deny the utility of Soviet military power for coercion or war.

The Joint Chiefs of Staff believe that our strategy provides this Nation with a sensible approach to preserve the peace and protect our national security. It is a strategy which makes it clear to potential aggressors they cannot achieve their goals by war or by the threat of war. The success of our strategy will continue to rely on the ability of the Nation to provide ready, modern forces. The Joint Chiefs believe that the revised budget for FY 85 will do that, though at lesser levels than requested by the Joint Chiefs.

The Joint Chiefs believe that this request, while not all we would like to see, is sensible and retains balance sufficient to support our strategy. On that point, I want to emphasize that the Joint Chiefs have looked at the strategy, at the threats to the national interests, and at this budget. We have concluded this program provides the necessary balance among land, sea, and air forces and between conventional and nuclear forces. It will assure the effectiveness of existing forces -- at a modified scale -- while providing for longer term improvements in our forces.

SUCCESSFUL LEADERSHIP OF DEFENSE BUDGET

Senator **STEVENS**. Thank you very much, General.

With the agreement of the members of the committee, I think it would be wise to impose a 5-minute rule, so that we can get some initial questions presented to our two witnesses.

Let me start out by congratulating the two of you. I think that the Department of Defense is well served, Mr. Secretary by you and by General Vessey. I can't remember two advocates for a strong defense who did a better job in presenting their viewpoints to the Congress, particularly this committee.

The other morning, when General Wickham and General Gabriel briefed us about the new agreement between the Air Force and the Army, and I understand that there is going to be a follow-on with Admiral Watkins, it would seem to me that that is the kind of thing that represents the coordination that is necessary to eliminate duplication in the spending effort, and to make certain that the dollars that we are providing to the Department of Defense are well spent in the future.

So I congratulate you both on that, and I hope all of the members of the committee have had an opportunity to get the information concerning that agreement.

Mr. Secretary, we have had some adjustments here. I understand General Vessey's point of view concerning the reductions. There was nearly a $31 billion reduction from the projection of last year. If the budget that projected last year were submitted, we would have actually $31 billion more before the committee in terms of requests.

U.S. COMMITMENTS WORLDWIDE

Can you tell us, Mr. Secretary, will these reductions in any way inhibit us from meeting our commitments worldwide as far as our defense forces are concerned?

Secretary **WEINBERGER**. Mr. Chairman, first of all, I appreciate very much your kind words earlier, and I know that General Vessey does, too.

We have commitments that require us to be in a number of different parts of the world and require us to face the sobering and unhappy fact that the Soviets are capable of launching an attack of very great strength from more than one place at once. What we have been doing in the last 3½ years is regaining the strength necessary to deter them from believing that they can succeed if they use that military strength.

To the extent that we lose the readiness and the sustainability that these cuts represent, to the extent that we lose the R&D efforts, and to the extent that we delay the modernization of our forces, we have to say that we are less able to meet our commitments in various parts of the world as a result of the reductions proposed this morning and the reductions we have made internally to get to an acceptable figure in February. I think that it would not be fair to you or to the American people to contend otherwise.

It is essential that we have as quickly as possible a deterrence capability, conventional and nuclear, that gives us the right and the opportunity to convince the Soviets that they should not make an attack, either singly or simultaneously, in the various parts of the world in which we have such a critical interest and stake for our own security.

I guess my answer to your question has to be, yes, to some extent it reduces our ability to meet the commitments that we have to meet and may have to meet in various parts of the world.

MX REDUCTION

Senator STEVENS. You made a comment about the MX reduction. We have noted the process now in the other committees concerning the authorized level of acquisition for the MX. You have indicated that if that continues, you would like to see some specific restorations in other areas in order to maintain the level of the commitment in the agreement as far as the budget is concerned.

Secretary WEINBERGER. Yes.

Senator STEVENS. Everyone noted that there are two caps. One is a cap on nondefense, and the other is a cap on defense spending. As far as we are concerned that means that the $299 billion, as far as the figure is concerned, was a commitment to do the best we can to get to that level. What is your priority, what would you put in there?

Secretary WEINBERGER. Basically, we put in for 40 MX's, and that is our priority. The two committees that have acted on the matter thus far have made reductions, one to 15 and one to 21 missiles.

The reason that we asked for 40 is that we think it is essential that we continue TRIAD modernization as quickly as possible, to give us a missile with accuracy and yield to destroy Soviet hardened targets. They have had such a capability for many years, since about 1977, and a capability like that improves our deterrence is out of balance. We asked for the 40, and they ought to be authorized. That would get us on a path to be able to deploy the full 100 that we think are essential in the near term.

If the committees' actions, with which we disagree and do not support, but strongly oppose, are carried out and the final number is 21, then there will be, obviously, a saving of dollars. What we are saying is that the President agreed to a reduced defense total down to the $299 billion, $291 billion for the defense function alone. If the Congress decides, in their choice of priorities, that they only want 21 MX missiles, then, the savings that are achieved by that should be put into some of the other programs.

Readiness and sustainability are the important ones. We could outline in great detail some of the things that we think are needed, and some of the things that would give us more ammunition, more spare parts, more in the form of training time. We also think that there should be some restoration to the R&D expenditures that had to be reduced.

Thus, the President agreed to a particular cap, a particular number also on the domestic side, and if there are to be reductions made in the MX procurement, then the savings should be reapplied into items that we have had to cut reluctantly, as you heard from General Vessey and from me, to meet that reduced total.

Senator STEVENS. Thank you very much. I have reached the 5-minute limitation.

BUDGET REDUCTION EXERCISE

Senator CHILES. Mr. Secretary, in February of this year, I asked you how much of the $94 billion in DOD savings claimed by the Grace Commission you supported. At that time, I think you estimated that you would support about 70 percent of the recommendations.

I also asked you then if you could provide some specifics of what might be available, or what would be available for the budget reduction exercise. Do you have that?

Secretary WEINBERGER. We have incorporated a great deal of that in the budget we submitted in February, Senator, because we are already carrying out and doing 75 or 78 percent of what the Grace Commission recommended. Eighty percent of what they recommended needed legislation, and we have in various forums and in various ways indicated the desirability of much of that legislation.

We have taken a great many of the savings that we can take administratively. We have to disagree with some of the savings that they project. Some of the savings that they project require very large immediate expenditures, such as savings that could be achieved by putting in new generations of computers.

Senator CHILES. My time is short. Would you give us a list of what savings you have taken, what the amount of those savings is, which ones you plan to take, which ones you reject and which ones require legislation.

Secretary WEINBERGER. Yes, sir, we will do that. I just mentioned one, and that is to put in new computers that would cost $1.5 billion the first year, but in a 9- or 12-year period, you save a little over $2 billion according to their estimates, if my memory is correct. It is in that range. We will give you those.

[The information follows:]

GRACE COMMISSION PROPOSALS

Grace Commission proposals relating to DoD were based in large measure on reviews by the Grace Task forces of ongoing DoD activities. In many cases, the Commission urged the DoD to do more, building on initiatives already underway. Therefore, it is extremely difficult to categorize Commission recommendations as entirely new, or to separate out some DoD FY 1985 budget proposals as being a "direct result" of the findings of the Grace Commission. In fact, Grace Commission recommendations relate to about half of the almost $50 billion in savings projected through FY 89 for management improvements in DoD's Economies and Efficiencies report.

In some cases, DoD management initiatives addressed by the Grace Commission have already been reviewed both by DoD and by Congress. For example, the Grace Commission recommends that DoD aggressively pursue additional multiyear procurement. DoD has proposed 14 additional multiyear candidates in its FY 85 budget request, with an estimated net savings of $1.3 billion. Two of the 14 were the subject of notification letters to Congress and the remaining 12 are identified for the first time in the FY 85 budget.

For some Grace Commission issues, the major congressional action required is the authorization and appropriations of funding already included in the FY 85 DoD budget request. In addition to the multiyear candidates above, this includes, for example, Army funds for value engineering and productivity enhancement, Navy funds for computer upgrades for its supply and inventory management systems, and Air Force funds for modernization of automatic data processing equipment (ADPE). All of these DoD management initiatives relate directly to specific Grace Commission proposals.

Several of the Grace Commission proposals urge Congress to remove restrictions that prohibit or restrain DoD from taking actions that could result in savings. In some cases, those restrictions have already been removed or have expired. For example, an earlier congressional restriction prohibited DoD from conducting studies for contracting out commercial activities to the private sector. This prohibition has since expired, however, and no further action is required by DoD.

In other cases, DoD has already proposed changes that Grace recommended. For the second straight year, DoD has requested the repeal of prohibitions on any consolidation of DoD surface transportation functions; Congress failed to repeal this prohibition in FY 84 legislation.

A number of the Grace Commission proposals involve new legislation. Where DoD supports such actions and believes legislation will be more effective than administrative changes, DoD is developing the necessary proposals. These proposals must first be cleared by OMB. This process has already been completed for DoD proposals to revise the Selected Acquisition Report (SAR) and Unit Cost Reports sent to Congress on major weapons systems. The proposals were included in Title X of the FY 85 DoD budget request.

The Executive Branch review process for Grace Commission proposals is not yet complete. Until it is completed, more definitive information about specific DoD positions and savings will not be available. However, as this process continues, DoD will continue to seek additional savings opportunities.

CASH PAYMENTS TO DEFENSE CONTRACTORS

Senator CHILES. At the beginning of the administration's defense buildup in 1981, you decided that we needed to increase the number of cash payments that are made to our defense contractors. At that time, the rationale was that the interest rates were so high, and inflation was running so high, that the defense industry was distressed and it needed to have some cash.

The Grace Commission determined that the economic conditions had improved to the point that $9.4 billion could be saved, and the CBO says that that figure is about $6 billion according to the CBO estimates.

Secretary WEINBERGER. That is not actually a savings, Senator, it is a cash flow problem because the amount that the contractors have to be paid is determined by the contracts, and in the final negotiation, we try to hammer those down.

PROJECTED CASH FLOWS

Senator CHILES. It is an immediate cash flow savings is what they are saying. If I decide that I am going to hold my creditors at

35 percent rather than 25 percent, I can certainly project what my cash flow is going to be on that basis. Has the Defense Department made a determination?

Secretary **WEINBERGER**. I have to tell you, sir, that we are faced with statutes that require very immediate payment of very large parts of the bills.

Senator **CHILES**. The statutes haven't changed from the policy that was changed. The statutes have to do with late payments, do they not?

Secretary **WEINBERGER**. Yes. We are fully within the statutes.

Senator **CHILES**. You were fully within the statutes before.

Secretary **WEINBERGER**. No, we were not, as a matter of fact. A lot of payments were being made on a delayed basis, and the contractor complaints bear that out.

Senator **CHILES**. After the due date, that is right. But when you were setting up these payments before, when you were holding back a certain amount for a certain period of time, that was within the statutes.

Secretary **WEINBERGER**. We hold back in accordance with various contract provisions. We don't do it as a universal thing.

Senator **CHILES**. Can you tell me, do you agree with the Grace Commission report, which your IG has now said they agree with, or do you not?

Secretary **WEINBERGER**. I agree with the fact, Senator, that it is frequently no longer necessary to make large cash advance payments. The point I am trying to make is that we settle most of these in the new types of contracts that we are drawing up, which frequently provide a sharing of the benefits that can come from rapid work, or work within budget.

Senator **CHILES**. Can you make a cash flow savings of $6 billion?

Secretary **WEINBERGER**. I don't think you can, sir, not now. But whatever we can get in the way of immediate cash flow savings, we obviously try to get. We try to get it by contract, and I have to say that we have been quite successful.

Senator **CHILES**. I wonder if you could give us this information so that we can understand it. I am constantly being hit by people, every time I go to a business group, they want to know what we are doing about the Grace Commission. Are we going to do anything about it. We are trying to set up a mechanism whereby we can try to get some of the Grace Commission savings.

Secretary **WEINBERGER**. I suggest that those same business groups are going to be the first ones also to tell you that we don't pay enough early on.

Senator **CHILES**. They may be. If that is the reason, and that is the Department of Defense's rationale, I want to be able to tell them.

Secretary **WEINBERGER**. We will be glad to give you the information.

[The information follows:]

ANALYSIS OF IMPACT OF TREASURY OUTLAYS

As a result of the Grace Commission efforts and the Administration Reform 88 program to improve cash management, we have conducted an analysis of the impact on Treasury outlays which would result from a 10% decrease in progress payment rates. The results of that analysis show there would be a reduction in outlays in the early years, but there would be a more than offsetting increase in outlays in subsequent years because the additional borrowing costs incurred by defense contractors would be passed on to the Government. This increase could be ½% to 1% of contract prices in order to make the contractors whole, and we believe this would be necessary to preserve the health of the defense industrial base. Since the interest rates incurred by defense contractors are substantially higher than those incurred by the Treasury, we do not believe it would be cost effective to lower progress payments from their current levels.

REDUCED BUDGET A JEOPARDY TO NATIONAL SECURITY

Senator CHILES. In earlier testimony this year, you indicated that any reductions to lower the $313 billion would jeopardize our national security. In the $14 billion budget reduction package, we see that it looks like the procurement is to be reduced $8 billion. As I look to see actually what systems were actually discontinued, it is less than $200 million of actual discontinuance or program cancellation, the rest or 98 percent comes from repricing, referral, and stretching out. Isn't that going to lead us to just what you told us earlier; it is going to increase the costs involved?

Secretary WEINBERGER. It is going to increase cost, there is no question about it, Senator. The reduction of $14 billion that we are required to make does increase the cost, it does stretch things out, and it does lengthen the time when we regain a balance in forces.

Senator CHILES. Wouldn't we be better off to find some system, and say, this is a system that is marginal. It doesn't make sense to procure this in light of the fact that you have to reduce?

Secretary WEINBERGER. Senator, you overlook the fact that we already took off $16 billion by that method before you even saw the budget, before we sent it up. I have to try to correct the impression that there have been no attempts made to reduce the budget before. We have, and we have reduced, and we have taken out some systems, and we have slowed down others.

The systems that are in, and were in last February, are the ones we consider absolutely essential. In order to meet this second request for reductions, we did slow down some of those. There is no way that you can make these kinds of changes without injuring the security, without adding to the risk, and without adding to the cost.

PROGRAM CANCELLATIONS

Senator CHILES. What did you cancel in the $16 billion that you took off?

Secretary WEINBERGER. I can give you the full list. There is something like 32 programs as I remember it.

Senator STEVENS. Senator, I am sorry but your time has expired.

Senator CHILES. I would like to get a copy of that.

Secretary WEINBERGER. We will be glad to furnish you that, Senator. Not all of the $16 billion was made up of canceled programs.

Senator STEVENS. May we have that for the record, too, please, Mr. Secretary, that and the previous listing.

Secretary WEINBERGER. We will provide those for you.

[The information follows:]

PROGRAM CANCELLATIONS

The $16 billion reduction included the cancellation or reduction of 70 programs, including anti-armor cluster munitions, light armored vehicle, WASP anti-armor munition, F-4 low smoke engine modifications, close combat laser assault weapon, medium tactical truck, AN-SQQ 89 on-board trainer, multiapplication core engine and many others.

In summary, the $16 billion reduction to the FY 1985 program consists of the following categories:

[Dollars in millions]

Repricing for economic assumptions:	
Fuel	$1.5
Inflation	1.6
Pay	1.3
Program budget reductions:	
Spare parts	1.0
Ship repricing	1.0
Classified programs	.3
Defense Production Act purchases	.3
Army missiles	.4
Army vehicles	.3
Armored vehicles and repricing	.3
MilCon family housing	1.2
MX program changes	1.6
Other	5.8
Total	16.6

WARRANTIES

Senator STEVENS. Senator Andrews.

Senator ANDREWS. Mr. Secretary, it is good to have you here. The last time that you appeared before the Budget Committee was on February 6, and we talked about the warranty requirements that were put into law by this committee. You told me that you supported the warranties, and we welcomed that. Then you sent up a budget request from your Department saying that you wanted to undo them. In the ongoing hearings, of course, we have developed quite a case for them.

The day after you appeared before the Budget Committee and said that you supported them, one of your public information officers in the Pentagon said that, no, the Pentagon was against it. You were then kind enough to call me up and say that, no, you were for them. The next day, a Pentagon information officer again said that the Pentagon was against them.

In the hearings we had, we had the various Secretaries. Secretary Orr testified before us that he liked section 794 better than the specific ones, and that he was a champion of warranties. Secretary Lehman testified before the subcommittee in early March and said, and I quote: "The fact that Congress has taken action concerning warranties, has strengthened our hand when the contracts are on the table." He went on to say that they save money and get better quality in their contracts because of the warranties. Finally, Chief of Staff of the Army testified before this subcommittee that he also pledged his support for warranties saying: "Senator, I am all for warranties."

Mr. Secretary, it would look like all of you at the top are for them. In your statement today, you said that you are for them. Can we then assume, given this widespread support for the warranties, and the fact that the Senate Armed Services Committee yesterday marked up some small amendments to them, which in my estimation and in the estimation of the members of this subcommittee, strengthen the warranty law, that the statement you made before the subcommittee is operational and we are now onboard?

Secretary WEINBERGER. I don't see why you asked that last question, Senator. When I want to know what Senator Andrews thinks, I don't ask one of his clerks, I ask Senator Andrews.

You have asked me and I have told you repeatedly. You have talked to the Secretary of the Air Force, and the Secretary of the Navy, and the Chief of Staff of the Army. So I can't understand why you have any question whatever. The problem is, of course, that there are all kinds of warranties. The problem also is that we have been advised by members of the Senate Armed Services Committee that they wanted to make some changes, and we have been working with them.

I haven't seen the exact changes that they have made, but we have told you from the beginning that we are favorable to warranties, that we support them, that we like the idea, and that we do feel that it is important. When we say warranties, we have to know precisely what we are talking about, and not write something into the law that rigidly might require us to spend a great deal more money than we would otherwise have to. A cost-effective warranty is a very good thing. Let there be no misunderstanding; we are all for it.

DEFENSE DEPARTMENT MEMORANDUM ON WARRANTIES

Senator ANDREWS. We appreciate that, Mr. Secretary.

The thing that confuses us on this committee is that 3 days after you stated that you were all for warranties, one of your Under Secretaries, James Wade, Jr., acting, sent a memorandum to all of the Secretaries in all of the military departments to gin up facts and figures on the warranties. Let me quote what he asked for:

"In addition to data on existing warranties, it is requested that each service provide an estimate of the additive contract costs to apply the section 794 requirement on 10 sample congressional data sheet weapon systems." It doesn't say, look for savings. It just says, additive costs. It goes on to say: "If the aforementioned categories don't provide 10 examples, it will be necessary to select other potential annual production costs."

So some people within the bowels of your Department, Mr. Secretary, are going against your direction, and are trying to do a job of lobbying. The committee has also asked to be provided with the lobbyists that he was working with, and we have yet to get that information.

We would be interested to find out why the Secretaries testify very directly in favor of warranties, and others seem to be working at cross purposes. Given your statement today, and given your statement on the record, we are glad that the great warranty war is over, and that we can proceed on getting weapons that do work and are cost effective.

Secretary WEINBERGER. We want cost-effective warranties. We want weapons that work. We want you to look to the heads of the

Department, the policymaking officials, for the policies of the Department.

Senator **Andrews**. Sure, but we get concerned about what goes on down in the bowels of your Department.

Secretary **Weinberger**. We don't have access to the interoffice memoranda in your files, Senator, but it is perfectly possible that there may be some memoranda in there counseling you not to support warranties, I don't know.

Senator **Andrews**. We have had trouble getting access to some of the memoranda, too, but we finally got some very interesting ones.

Secretary **Weinberger**. We have a good warranty in the alternate fighter-aircraft engine. It is, I think, a very good example of the kinds of things that we hope to get in the future.

Senator **Andrews**. As a matter of fact, Secretary Orr said that it provided some $2 billion worth of savings.

Secretary **Weinberger**. That is right.

Senator **Andrews**. Since on this subcommittee we are the bankers of the Defense Department, we want to be sure that you are cost effective.

Secretary **Weinberger**. We do, too.

PERSONNEL COSTS

Senator **Andrews**. Let me ask one follow-on question.

The biggest expenditure in the Department of Defense, of course, is personnel. Mr. Secretary, why can't we make savings, for instance, in our commitment to NATO. When we are now replacing the M-60 tanks with M-1 tanks, the M-1 tank has three times the fire power. If we are going to maintain the same kind of fire power in supporting our NATO allies, why then can't we begin reductions in personnel as we send these new tanks overseas that have in fact three times the fire power?

M-1 TANK CAPABILITY

Secretary **Weinberger**. There are two answers to that, Senator. The first is that the M-1 tank is the first one in 20 years that is as good as the Soviet's. We have been going over there and taking the desperate chance of perhaps having to put our men into combat with a tank we know is inferior to the Soviet's, and that is no longer the case for them.

You don't have any manpower savings when you substitute the one tank for the other. Your have, however, an increasing Soviet threat. You have an imbalance of tanks against you that is about 44,000 to 14,000. Certainly, with the responsibilities that I have been given by the President, I could never recommend that we bring home people from the Central Front in order to save a little money when I know that it wouldn't save any money unless you are going to discharge them out of the Army.

Senator **Andrews**. I believe that what you are saying, Mr. Secretary, is that the goal of the administration is to increase our fire power in Europe for the NATO allies, rather than to maintain a stable line of fire power.

Secretary **Weinberger**. The goal of the administration, Senator, is to maintain a credible deterrent, and a credible deterrent is not a static concept. It is a concept which has to change as the threat against you changes. The threat against us has changed a great deal since we were first able to deploy tanks to NATO many years ago.

The Soviets have improved their tanks. They have four different models, including the 72 and the 80 which are now coming on line, and they are working on another. It is essential, if you are going to maintain a credible deterrent, that you make the increases in strength necessary to maintain that deterrent. We are not talking about military superiority. We are not talking about getting 45,000 tanks.

Senator **ANDREWS**. You say that the goal is increased strength.

Secretary **WEINBERGER**. The goal is to maintain a credible deterrent, which sometimes requires increases, but frequently requires revisions, and always requires careful; scrutiny of what the Soviets are doing. We cannot in a vacuum say that we are going to maintain 100 tanks here because that is a nice number. We have to look at what we have to do because of Soviet actions. It does require, certainly, increases in fire power when you have the kind of situation that we face there.

Senator **STEVENS**. Mr. Secretary, and General, if you will excuse me, I have to appear before another committee.

Senator Andrews has concluded his time.

Senator Rudman.

HIGH STATE OF U.S. READINESS

Senator **RUDMAN**. Thank you very much, Mr. Chairman.

Let me comment very briefly on General Vessey's statement. I think that it is important that someone on this committee make a simple statement that your statements on readiness are absolutely true. Anyone who knows what they are looking at, who has visited the 7th Fleet, the Armed Forces in Europe, the tactical air wings in Great Britain, and most of our major training centers in this country has to agree that readiness has greatly improved. You deserve a great deal of credit for taking the funds that have been supplied to you in the readiness accounts and doing very appropriate things with them.

There has been some tangential criticism of readiness, picking an isolated case here and there, but the fact of the matter is that readiness is at a high state throughout all three of the services. I just wanted to make that point for the record.

Mr. Secretary, I want to ask you a totally different kind of question because I am presently working and have been for some time on a major legislative proposal which I want to introduce next year. It has to do, essentially, with what I believe is a systemic problem that we never talk about around here. We tend to talk about the problem of the day, quite often the sensation of the day like the $400 for a hammer, et cetera.

In testimony before this subcommittee this year, in fact several weeks ago, Dr. Delauer indicated, I will give you three examples, on the AMRAAM program, to use his words: "the management was terrible." We brought out during the hearing that there were four programs managers in a little less than 4 years. We have some interesting background information on the qualifications of those managers.

TURBINE ENGINE PROCUREMENT

Moving from that, in looking at your jet-turbine-engine procurement, there are, I am sure you are aware, six major procurement organizations dedicated to the development and acquisition of the turbine engine, one for the Army, two for the Navy, and three for the Air Force. There are about 20 military program managers for those programs. They are now in the process of developing and procuring 42 separate turbine engines from five manufacturers, two heavy-turbine-engine manufacturers and three light.

In the tank area there are now 44 separate programs in the three services. There are about 170 uniformed personnel from the three services, and 3,500 civilian personnel from the three services, all involved in that program. Obviously, we could go on from there.

SYSTEMIC PROCUREMENT REFORM

My question is truly a question, and not an adversarial statement. Are you, as the Secretary of Defense, giving any thought, within what you are doing in the long term, toward major procurement reform within the Department of Defense because of the limited dollars which we all know we are facing in the next decade to meet a threat which I agree with you is very real. What are you doing about meaningful, systemic procurement reform?

Secretary **WEINBERGER**. We are indeed giving a great deal of thought to that, Senator. It is a very good question, and it is a critically important area to be concerned about.

We have two or three points that we have to bear in mind, and I would like General Vessey to comment on that, too, because he is am expert in all of these areas.

One is that there are a number of different missions, a number of different ranges, a number of different types of antitank activity, different types of aircraft missions, from long-range observation and reconnaissance to deep reconnaissance. There are invasion modes that require different kinds of applications of some systems. That is not said to excuse or to state that we have to stay with exactly what we are doing, but it is stated at the beginning so that the nature of the complexity of the problem be apparent.

The Chairman was kind enough to comment about the statement of General Wickham and General Gabriel about the interservice work that they are going to do together. There is going to be a great deal more of that in a number of different areas.

We certainly have given a great deal of though to what is needed. Basically, what we think is needed is a function of somewhat longer range planning, and it is also a requirement that we identify very good managers, and try to keep them on the job for a longer period of time, particularly when their performance warrants it.

It is perfectly true that under the normal rotational assignment rule, people given an assignment as a program manager will do a good job. Then in the nature of developing their career potential, and so on, they are tapped for other positions and moved on. You have to keep that process even though there is a familiarization time, and all the rest that slows it down.

We have looked, and are looking, at a number of things. We are not yet ready by any means to say that one single, centralized procurement agency to buy everything for the Department is that answer. We certainly believe that improvement is possible.

We have made substantial improvement, we believe, already, but it is a matter of continual review, and we would be delighted to work with you and see if there are any ways in which we could both benefit from such consultation. We want the same thing.

We made substantial progress. There is a long way to go. But we can't, I think, realistically expect that we are going to have one antitank system, one turbine engine, one tank engine, et cetera, et cetera. We are going to have to have a number of differences because of the differences in the mission. Again going back to it, it is the kinds of multiple threats that we face.

Senator RUDMAN. General Vessey may want to comment.

General VESSEY. Thank you, Senator.

SERVICE WARFIGHTING REQUIREMENTS

I would like to add to what the Secretary said. The agreement announced between General Gabriel and General Wickham the other day is a good example of what the Chiefs have been doing looking across the warfighting requirements of each service, and how each service plans to meet those, and see where there are areas of overlap or duplication, and place where each service can capitalize on work that the other services have done in order to save money and still get the job done faster and better.

At the same time, it is worth recognizing that a total centralization can lead you to, perhaps, some economies, but it can lead you to some colossal mistakes, too. So there is a balance. Some people may do a different job two different ways in order to meet the battlefield threat.

I just want to tell you that the Joint Chiefs are deep into this process, looking at it in great detail, from the business of the warfighting requirements, where are the areas of overlap and duplication, or what programs are there that need to be exploited, and which ones should be killed or reduced, in order to do exactly what you pointed out.

Secretary WEINBERGER. I would like to add again, Senator, that we are delighted to know that you are working on it, and we would like very much to work with you and your staff to see if we can get a result of which we can both be proud as early as possible.

Senator RUDMAN. Let me take 30 seconds for a comment. This is not a question, this is a warning. I will be bringing before you and the country as a whole, in the next 90 days, a rather revolutionary proposal on which I consulted with many people in the private sector, management experts, and so forth. It will be the basis for a discussion which I think is going to have to take place over the next 4 or 5 years if we are to maintain the kind of forces that we must maintain within the dollars that we are going to have available. It will be something for discussion, and I look forward to working with you on it.

Secretary Weinberger. Excellent. It would be very helpful, and it is certainly correct that we need all the help we can get in trying to get more for each dollar.

Senator Andrews. Senator Kasten.

Senator Kasten. Thank you very much.

MX MISSILE

Mr. Secretary, I just want to pick up on something that the chairman had said earlier on the MX. I know many people think that the so-called MX compromise that was reached is a victory, or at least good news. But it seems to me that we made a tragic error. On the one hand we told the Soviet Union that they would not benefit in any way by walking out of the talks, is that not correct?

Secretary Weinberger. That is right.

Senator Kasten. But on the other hand it seems to me that implicit in this so-called agreement is that the Soviets by walking back in, derive a direct benefit from this so-called policy. I believe we were wrong in involving the Soviets so directly. It is as though they now have a veto on our one key weapon, which we desperately need and want.

Secretary Weinberger. We have a lot of comments about the restrictive clauses that were put on the 15 in the House, but it is essential that we proceed with production as quickly as possible because this does regain our deterrent capability. We will be glad to discuss with you the restrictive clauses that were put in and their effect.

Senator Kasten. This is just step 1, but I am hopeful that this restrictive process isn't one that you or others are signing up on. It seems to me that it goes beyond the joint weapon system. It deals with the basic idea of whether we are going to be able to go ahead and build our defenses for the protection of the free world.

Secretary Weinberger. The legislative process is a long and difficult one, and that was one step in it. We will be very glad to discuss your very perceptive comments and analysis of those restrictions.

PROCUREMENT

Senator Kasten. I wanted to ask a little bit about the procurement, which it seems to me is very much on everyone's mind this morning. The Department of Defense has come under a great deal of criticism on the issue of spare parts and warranties. I think we all agree that the best warranties arise out of competition, and not out of legislation.

The fact is that I strongly support the warranty effort that Senator Andrews and others have been a part of, but I believe that we ought to concentrate on the areas in which the procurement of spare parts results in some real competition. All of us have talked about competition. The subcommittee is in favor of competition, and we have asked you to do everything you can to increase competition.

I would like to ask you, in terms of competition, how the policy has changed since you became Secretary. Under this administration, what initiatives specifically have been developed to improve the competitive process?

Let me add one clarifying point. Do you see the attempt to limit the proprietary rights of defense contractors for spare parts as improving the competitive process? This may be a series of questions, but they are all related.

Secretary **Weinberger**. Let me mention one specific instance, Senator, and that is again the new fighter aircraft engine. We had a requirement that the winner of that competition was to design the engine so that the parts needed for it could be supplied by a number of different manufacturers and that there be a waiver of the proprietary right, all with the idea of increasing the competition for the spare parts for that engine, as well as the competition for the engine itself. We opened up that for the first time.

We also are trying to extend that in the contracts that we make in a number of different ways so that we do not have a situation in which the contract provides that we have to get all of the parts from the original manufacturer at the price he wishes to charge, which was one of the key problems in the spare parts situation that we have corrected.

M-1 TANK ENGINE

All of these things are designed to increase and encourage competition. There are some negative factors. As I am sure you know, we are forbidden to compete the M-1 tank engine. We are required to go sole source for that, and we know that that will cost us a great deal more money. We have urged that that restriction be removed, but to no avail.

The general thrust of your question is one with which we are in total agreement. We want to increase the competition. We believe that the various instances that I have mentioned do increase it, and we obviously will work at it because we think that the thing that will reduce costs best and give us quality is competition.

For a while, you know, we couldn't get many people to bid. They regarded the Government as a pretty unreliable customer, but I think that things are improving.

Senator **Kasten**. With some justification.

Secretary **Weinberger**. With considerable justification.

Senator **Kasten**. I, and other Members of the Senate, have cosponsored a bill that we are calling the Small Business Competitive Action Act, that would encourage small businesses to participate in sales to the Government, and I believe will greatly reduce the noncompetitive contracts, and I think that it will improve the overall process. It is out of the Small Business Committee, and it has now been referred to the Armed Services Committee.

I just wanted to know if you are familiar in general with the legislation, if you agree with the thrust of the legislation, and whether or not it fits into your plans to remedy the small parts problem and the lack of competition that we have?

Secretary **Weinberger**. I am not specifically familiar with that legislation, Senator, but I will be glad to become familiar with it, particularly now that it is going over to the Armed Services Committee. I am certainly in full agreement with the thrust of it which is to increase competition and thereby lower prices, and give us a wider number of bidders from whom to choose the ultimate supplier.

The only thing I would caution is that the rigidity of it could sometimes make us spend more if we do have an opportunity to get a lower price from someone who is not formally classified as a small business. But we do have a setaside, as you know, for small business and minority business, and we fulfill those quotas to the greatest extent we can.

Basically, anything that encourages more competition, we think will save us money and will give us better equipment, and we are for that.

Senator KASTEN. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

Senator STEVENS. Senator D'Amato.

Senator D'AMATO. Thank you, Mr. Chairman.

ACTIONS AGAINST DIRECTOR OF DCAA

Mr. Secretary, I just want to make one observation.

It would lend a lot of credibility to the spare parts efforts, and the fact that we ought to do something in this area if you would take action with respect to Mr. Starrett, who is the Director of Defense Contract Audit Agency, and those who work with him.

I think the record is absolutely clear, and the fact that he is now before the administrative procedures of the Merit Protection Board and is awaiting a decision, after the decision, he can appeal to the Federal courts. This doesn't address the problem.

You ought to take a look administratively to see whether or not his handling of the Spanton case is correct, whether or not he did direct inappropriate action to be taken against Mr. Spanton. You can remove him, give him his pay. The response that I have had to my communications from you that we have to wait for this Board to make its decision, I think, is inappropriate. He should be fired, as far as I am concerned.

I think that we are not taking appropriate action in that case. Mr. Starrett should not be the Director of the Defense Contract Audit Agency, and his actions have been shameful. The actions of the people who work with him have been shameful. This is one Senator who has to question really whether or not we are undertaking the kinds of things we are saying that we are doing on spare parts as long as you have a person like that as the head of that agency.

I have looked at that, I have read the testimony, which is something you can do. You are hiding behind that procedure, and that is what it is. Your responses have been inappropriate to date.

Secretary WEINBERGER. Senator, there is nothing in the Administrative Procedure Act or anything else that either requires or would induce me to find anybody guilty while they are presumed innocent, and I am going to wait until the final determination of this matter. I certainly have no reason whatever to believe at this time that because a few charges have been brought that someone is guilty, or shameful.

Senator D'AMATO. Have you looked into them?

Secretary **Weinberger**. Of course I have looked into them. I will have nothing to do with requiring him to be fired while we are in the middle of the procedure. I certainly would not want to fire you if you were in the middle of an impeachment trial, and I have no intention of doing anything until there is a determination as to whether this man does or does not require any kind of disciplinary action.

Senator **D'Amato**. Obviously, no disciplinary action should be taken is that what you are saying?

Secretary **Weinberger**. I am saying that I am going to wait for a determination.

Senator **D'Amato**. Mr. Secretary, those are two different issues, clearly.

Secretary **Weinberger**. Senator, if you want me to condemn this man and fire him before the administrative procedures that you have set up are completed, you have come to the wrong man. I am not going to do that. I also have no reason to believe that there is any reason to abolish the rule of innocence until proven guilty.

Senator **D'Amato**. I have not asked to do that, Mr. Secretary.

Secretary **Weinberger**. You have just asked me to fire him, and you have also accused me of covering something up, which is absolute nonsense. This man has not been found guilty of anything.

Senator **D'Amato**. I will go over the record with you any time. What is pretty clear is that he is being afforded every single method by which to extend this process. The next step is going to be, even if the administrative law judge finds that his actions were inappropriate, he is going to take an appeal, and he will drag this thing out forever.

Secretary **Weinberger**. Why don't you put in a bill that repeals his right of appeal.

Senator **D'Amato**. I have not done that. You have the authority, Mr. Secretary, to make a determination without the Merit Protection Board. That Board is incidental to the authority that you have.

Secretary **Weinberger**. I would hate to try it if the shoe were on the other foot, and you had one of your constituents that you were trying to protect.

Senator **D'Amato**. I have never asked for that. If that were the case, Mr. Secretary, if there was a constituent who did the kinds of things that Mr. Starrett did, I would expect to take appropriate action to suspend him.

Secretary **Weinberger**. We don't know what he has done, and that is the whole point.

Senator **D'Amato**. All right, we have gone through that.

Mr. Secretary, I will again say that the credibility in terms of what we have said, and the procedure before the Merit Protection Board is something that I think is inappropriate for the Defense Contract Audit Agency.

SALE OF STINGER MISSILE TO SAUDI ARABIA

This morning's news, Mr. Secretary, reported that the administration is considering that the Stinger missile be sold to Saudi Arabia. My question is, what guarantees will you require from the

Saudis against the overt or covert transfer of these weapons to other states or other groups?

Secretary **WEINBERGER**. The same guarantee that we require from everybody to whom any weapon system is transferred, and that is a total prohibition against transfer to anyone else in the absence of specific permission from the United States.

Senator **D'AMATO**. Mr. Secretary, what reason do we have to believe that the Saudis will actually use the Stinger's against Iraqis in the current crisis?

Secretary **WEINBERGER**. Because it is the Iraqi who are attacking their shipping.

Senator **D'AMATO**. You are saying that these are not only to be used against the Iranians, but it would be against any of those attacks that are made?

Secretary **WEINBERGER**. Senator, we are not saying that they are even going to be transferred yet. You quoted from an article in the newspaper, and I usually don't comment on those until the President has made up his mind as to what he plans to do.

The questions you have asked are questions that relate to the requirements and the safeguards of transfers, and to the intended use. The intended use of weapons transferred has to be self-defense, and they are not permitted to be transferred anywhere without the specific permission of the United States. Those requirements apply to every sale that is made to every country.

Senator **D'AMATO**. Obviously, consideration is being given at this time. My concern is that in this transfer of weapons, we are going to have an evenheaded policy, and that it is not simply against the Iranians and their attacks, but that it apply to any group who will attack the shipping whether it be the Iranians or the Iraqis.

Secretary **WEINBERGER**. The whole thing is to enable the Saudis, if they want this weapon, and if we decide to transfer it, if indeed they use it, to protect their shipping. I would assume that they should use it against any source of attack against their shipping. It would be their decision, but it would be a decision that would have to be based on self-defense. It is part of our rules, part of our laws, and it has been in effect for many, many years, and the same would apply.

Senator **D'AMATO**. Thank you, Mr. Secretary.

Thank you very much, Mr. Chairman.

CENTRAL AMERICA PROBLEMS

Senator **STEVENS**. Mr. Secretary, I noted the action yesterday on the floor of the other body that intends to prohibit the President from using his normal constitutional powers with regard to Central America.

My feeling about that is that if we announce to Nicaragua that we are not going down there to carry out our treaty commitments except under very extreme conditions, we are giving them an invitation to use that military might. The people who have the strongest or at least the most heavily armed people on the face of the globe are the Nicaraguans today.

I can't see that concept being carried out by the Congress, but it worries me. Would you comment on that?

Secretary **Weinberger**. Certainly, the problem you have identified is very correctly part of the overall problem, and that is the enormous and growing strength of the Nicaraguan military, which is being financed largely and deliberately by Cuba, the Soviet Union, Bulgaria, and various other countries. It obviously constitutes a major worry to see that enormous accumulation of power. They are also making a very substantial resupply to the Salvadoran guerrillas.

These are points that the President and many others have called to the attention of the Congress, as well as to the nature of the government in Nicaragua. These are some of the things that we are trying to do; that is, to prevent, to the extent that it is possible, the continued Nicaraguan resupply of the guerrillas in El Salvador, which are trying to overturn a regularly selected government, and basically subvert the rights of the people who have expressed themselves in El Salvador.

USE OF U.S. TROOPS IN CENTRAL AMERICA

Senator **Stevens**. The President has made it very plain that he has no intention of using troops in Central America.

Secretary **Weinberger**. That is correct, we do not.

Senator **Stevens**. It seems to me that it is time that we started trusting the executive branch to conduct its constitutional duties without a restriction like that which could jeopardize the whole concept of being able to prevent, through negotiations, and through our other activities, the real military threat of Nicaragua being used in Costa Rica, El Salvador, and Honduras.

RELEASE OF CLASSIFIED INFORMATION

I am looking at some papers that we have here that indicate that we have a classified addition to the military construction bill in the House, specifically in my State. I read the New York Times this morning, and I find an explanation of the whole concept, including the classified code name of the activity. It sort of disturbs me. Did you see that article?

Secretary **Weinberger**. Yes, sir, I did. We are in a constant state of disturbance about the way in which classified information is handled. It seems to make no difference what the classification is, or what the importance to the security is, it is fair game to publish it on the front page of any newspaper that finds it. There seems to be an unlimited ability to find it.

It is a source of great concern. It is something that can only really be of major benefit to our potential enemies, yet it goes on constantly. I guess that you get sort of inured to it after a while. I have seen that article, and I share your feeling.

BUDGET CUTS IN SPACE PROGRAM

Senator **Stevens**. It is not related at all, but it is a little bit. We have seen that the House Authorization Committee wants to reduce the strategic defense initiative for the space program by some $400 million, and the Senate Authorization Committee would cut $150 million. It does not bode too well for that initiative.

Can you tell us what cuts of the size indicated for that program would do to it?

Secretary **Weinberger**. Obviously, the Senate action is better than the House action from our point of view. The first thing we ought to look at is the importance of that kind of program, and we think that if we can develop a thoroughly reliable defense against incoming Soviet missiles it is enormously in everybody's interest that we proceed with that as rapidly as possible.

The Senate action will slow that down to some extent, but the House action will slow it down greatly, and possibly even change the thrust of it. We think it is essential that that program continue, and continue at the basic level that we propose.

The real problem also, Mr. Chairman, is that the Soviets are working on precisely this kind of program. They have no similar constraints, no votes, and no reductions in their allocations of funds to it. If they should get this capability first, then this would be a far more dangerous and difficult world. It would mean that our deterrence capability would be very seriously eroded, if not wiped out.

We think that it is essential that we work on it. If we can get this capability, we can free the world of the threat from the shadow of the nuclear weapons. It is the most hopeful concept that we have. I strongly oppose reductions in our attempts to achieve it as quickly as we can.

Senator **Stevens**. While I am waiting for Senator Chiles, I will ask one more question.

M-1 TANK PRODUCTION

General Vessey, last year, this subcommittee, at least I and others on it, tried to prevent the ramping up of the M-1 tanks to production of 840. We tried to prevent the ramping up of submarine construction from three to four. I note that this year, with the budget revisions, we are back down to 720 M-1 tanks, and three submarines as we had advocated.

I am constrained to ask, and this ties back into the statement that I asked the Secretary before, isn't there a cost in ramping down that production? Wouldn't this be a place to keep that rate going, even though I opposed it before? Doesn't it cost less to keep that rate going rather than going back down to the lower rate of production?

General **Vessey**. In the case of the tanks, I am not sure because it is a complicated thing. As you know, the Congress raised it to 840 from the 720 requested, and now it is going back down to the 720 requested.

What the actual effect will be on cost in that particular case, I am not sure, because I am not sure exactly what the status of the contract is. We can get that information from the Army for you. Generally, the yo-yo effect in procurement programs costs money.

Senator **Stevens**. I think that we ought to try to avoid that yo-yo effect in terms of those types of procurements.

Senator Chiles.

Senator **Chiles**. I have a question that Senator Byrd would like me to ask.

Mr. Secretary, Senator Byrd asked me if I would ask you this question. He was unable to get over here this morning.

SPECIALTY METAL PROCUREMENT REQUIREMENT

Last year, a report issued by the General Accounting Office was brought to this attention that indicated that the administration had not been able to specifically identify and justify the exceptions that they granted to the specialty metal procurement requirement.

In order to determine enforcement of the congressional intent regarding those exceptions, the committee directed your office to prepare an interim report by April 1, 1984, which would detail each procurement in which the United States had purchased supplies from foreign sources. The interim report was expected by April 1, and it has not been sent to Congress as of this date.

Earlier this month, Senator Byrd requested in a letter to you that you investigate the reason why the Department of Defense has not forwarded this report. He wanted to ask, have you had the opportunity to determine whether the report would be forthcoming to the committee in the near future, and will the report be submitted to the committee prior to our consideration of the Department of Defense appropriations bill?

Secretary **Weinberger**. We will get the report to you as soon as we can. There has been a delay of about a month and a half. It involves collecting some rather complex data. We intend to do it and we will do it soon. I can't give you the precise date, but we hope to get it up here just as soon as it is ready. We are not trying to delay it in any way. It is one of a number of reports asked of us, but we will try to get it up here just as soon as we can.

Senator **Chiles**. I think specifically he is trying to find out whether you have it under consideration.

Senator **Stevens**. Any further questions?

Senator **Chiles**. No.

Senator **Stevens**. Senator Andrews.

INCREASE IN NATO BUDGET

Senator **Andrews**. Mr. Secretary, getting back to what we were talking about earlier. The problem this committee faces is how we can fit the military needs within the budget of this country. I know that you run this whole conference concept, but still and all, when you look at the fact that we are spending $40 billion a year more now for our NATO commitments than we were just 4 years ago, that is a sharp increase.

I ask you, with the new M-1 tanks going over there, if we cut the personnel in those tank units by a third, we would double the firepower. You said that we need more firepower. Even though those tanks do more, we can't utilize that as a diminishment in the growth. Where do we begin to get the savings, because the personnel are the big cost.

Secretary **Weinberger**. The savings in personnel or the big costs, Senator, would come from two sources. One is when the Soviets slow down. The second is, in the case of the ships, and in the case of the planes, we are able to put a cruiser that has a great deal more firepower, and a great deal more effectiveness at sea, with

356 people as compared to about 1,250 in World War II. That is a major saving in manpower, and we have the ship there that can do the same thing.

In your tanks, you have a totally different kind of situation. You face an enemy that is growing in numbers of tanks and in willingness to use them. We finally have a tank that is as good as his, and we think is better in many respects, but he is continuing to develop his. You cannot, by putting in fewer tanks, maintain your deterrent capability because the enemy's potential is not static. It is not going down. We are not talking about increasing our firepower, what we are talking about is maintaining deterrence that will be credible to him.

The other assumption is that if you bring a lot of people and tanks home from Europe, you somehow save some money, that assumes that we don't have any problems anywhere else in the world that will enable us to discharge them from the Army as soon as they get home. I haven't seen anything whatever that would support that kind of theory to bring people home from NATO.

COST OF MAINTAINING U.S. PERSONNEL IN NATO

Senator **Andrews**. It costs 2½ times as much to maintain that uniformed individual in Europe as it does to maintain him in the United States.

What you have said, actually, you have redefined our position. You said that it is the goal of this administration and of our Nation to increase our firepower commitment to NATO, and you are adding as a caveat that we have to do it in order to meet the increased Soviet threat.

Now let me spin away from that one.

Secretary **Weinberger**. Before you spin away from that one, would you want me to recommend to you that we reduce our firepower in NATO while the Soviets are increasing theirs?

Senator **Andrews**. Mr. Secretary, we are increasing our firepower. Your people tell us that an M-1 tank has three times the ability of the M-60. Therefore, in elementary mathematics, I would think that if we reduce by one-third the number of tanks, if they are converted to M-1's, we have twice the amount of firepower that we had before.

Secretary **Weinberger**. Senator, you have to get that platform into a position where it can be effective. If it is facing 44,000 Soviet tanks, you cannot go in there with fewer tanks.

Senator **Andrews**. So what we are looking for is greater firepower rather than a constant fire power.

Secretary **Weinberger**. I don't readily understand the semantical importance of talking about it in these terms. What I have talked about, and what I have to look at every day is the deterrent equation. I have to look at what the Soviet strength is, and whether we have enough to convince them that we have enough retaliatory strength should they attack, so that they would not be willing to risk the retaliatory strength we have.

Senator **Andrews**. We have increased our commitment by $40 billion over the last 4 years at a time when our NATO allies are cutting back on their commitments.

Secretary **Weinberger**. They are not cutting back on their commitments, Senator.

EQUIPMENT PROBLEMS FOR GUARD AND RESERVE

Senator **Andrews**. We have the same problem, Mr. Secretary. The Army Reserves and the Guard, in testimony before this committee not so long ago, stated that we only have 32 percent of the equipment necessary for those personnel.

Secretary **Weinberger**. That is why we asked for a higher budget.

Senator **Andrews**. That is fine, but if we only have 32 percent of the equipment necessary, why don't we deactivate a regular division, and fill the equipment for the Guard and Reserve, and save on those personnel costs because the Guard personnel cost significantly less than regular personnel.

Secretary **Weinberger**. That is fine. They take longer to mobilize, and they are not where you want them when you need them. It is not a matter of needing fewer, it is a matter of maintaining the kinds of commitments that we have in dealing with the threats that we face.

If you can get for me an equation or a situation where the threat is reduced, then I would be the first in line to try to reduce what we have. What we see is a constantly increasing threat.

Senator **Andrews**. The Guard personnel are effective. The Air Force personnel are extremely effective, Mr. Secretary, and they beat the regular Air Force in the William Tell on a regular basis, yet we have old planes in those Guard units. I would think that we could put new planes in the Guard units, and avoid adding new units to the Air Force, and have the same amount of readiness and fighter power that we need to maintain our freedom.

Secretary **Weinberger**. There are two or three points that have to be clear, Senator, and one is that during the whole decade of the 1970's, we cut back defense by more than 20 percent. We didn't save anything on deficit during that time because we increased domestic spending enormously.

We did not face the realities of the threat that we now face. We did not face the realities of the fact that you defend the United States better when you are in a forward position. We don't punish Europe by taking our troops out, we punish ourselves if we take our troops out.

We couldn't live in the world if Europe were overrun. We are not over there for altruistic purposes, we are over there to defend the United States and our allies and freedom. It is essential that we have the means to do it, depending on and required by the threat that we face.

U.S. COMMITMENT TO NATO

Senator **Andrews**. Nobody on this committee is saying that we should pull our troops out of Europe, but we have to be concerned about a $40 billion increase over the last 4 years in our commitment to NATO, while most countries are cutting back.

Secretary **Weinberger**. No, Senator, they are not cutting back. They aren't increasing at the rate that everybody would like them to, including themselves, but they are not cutting back. You have to bear in mind that during the 1970's, they put in a great deal more than we did. You have to bear in mind also that the important thing is to maintain a total defense in Europe.

Back to the Guard and Reserve, they are very fine, and nobody is denigrating them at all. I have to disagree with you that they are not getting new equipment; they are. They are getting some of the M-1 tanks that we are talking about. I have seen them in many of the Guard units. The fact is, we need them both. It is not an either/or situation. We need a total Army, and we need a total Navy and Air Force, and that includes and requires the Guard, the Reserves, and the regulars.

General Vessey might want to add something to the strength that we need, and the strength that we have and don't have now.

MODERN EQUIPMENT TO GUARD AND RESERVE

General Vessey. I would say, Senator, that the point that you made regarding the Guard and Reserve, that they are good units and they deserve to have modern equipment, is exactly correct, but not at the expense of the regular forces which provide the forward shield and the immediate reinforcement.

We do have modern equipment going to the Guard and Reserve, and I am very pleased to see that. We are using the Guard and Reserve in our defense plans perhaps more extensively than they have ever been used before. We had Guard and Reserve units on maneuvers overseas, and in all parts of the world this past year.

Senator Andrews. General, they can't be effective if all they have is wooden rifles a la 1930's. Thirty-two percent of the equipment needs doesn't strike us as being effective.

General Vessey. All we need to do to fix that, Senator, is up the rates of equipment purchase, up the defense budget.

Senator Andrews. Until we get that equipment in place, don't we have an excess of personnel?

General Vessey. We don't have anyone with wooden rifles.

Senator Andrews. They only have 32 percent of the equipment they need.

General Vessey. It doesn't mean that they are not equipped.

Secretary Weinberger. It doesn't mean that the equipment they have is no good or is wood, or anything of the kind. I trained with wooden rifles in World War II, and I think we never want to get anybody in that kind of condition again. With the responsibilities I have, I am never going to recommend anything to you that will procuce that.

What we have recommended right along is more money for these exact items you are talking about, and we would be delighted to accept those increases.

Senator Stevens. Senator Rudman.

Senator Rudman. Thank you, Mr. Chairman.

SECOND SOURCING ON M-1 TANKS

Mr. Secretary, let me go back for just a moment to the second sourcing argument about the M-1 tanks. As you well know, this committee found that totally unacceptable, and we tried to work out as best we could, essentially, a study which was presented to us earlier this year.

I think that it is just the greatest of ironies that this Congress beat you about the head and shoulders for not being more competitive in terms of your procurement, and then for reasons which I will be polite enough not to mention at this time, proceed to sole source that. It is the supreme irony of all.

Let me read to you from the authorization bill. They said over there in the other body that "The committee was concerned that the feasibility study would not represent an independent analysis," if you know how to read these things, it means that they were afraid that it might reach a different conclusion than they would. "Therefore, once the Army completes its analysis and submits it to the Secretary of Defense to review, we conducted a comprehensive hearing on the AJT-1500 second source issue. During the hearing, the Department witnesses stated that the study was fully conducted," that is really not accurate, that is not what the Department witnesses said at all.

Finally, of course, they found that the conclusions were not supported by the analysis, and of course they knew that in the first place, so it really didn't come as any great surprise to anyone.

My question to you is, there are people here in the Congress who are really not happy with this. Are you planning to seek relief? Is there an initiative from your office before the Senate Armed Services Committee, which is now marking, to try to reverse this?

Secretary WEINBERGER. Yes, sir. We pleaded repeatedly to have this language removed to allow us to go to competitive bidding on the tank. We will continue to push that in every way possible. We would urge this committee, and every other committee, to take similar action.

Yes, specifically, we have asked at every hearing to have this prohibition against competitive bidding on the tank removed.

RESPONSE TO HOUSE ARMED SERVICES COMMITTEE REPORT

Senator RUDMAN. It seems to me that it would be proper for this committee for Dr. DeLauer, at your instruction, supply for the record his response to page 47 of this House Armed Services Committee report.

Secretary WEINBERGER. All right.

Senator RUDMAN. It essentially characterizes his testimony totally erroneously.

Secretary WEINBERGER. We will get him to submit an entirely correct statement.,

Senator RUDMAN. I appreciate that.

[The information follows:]

M-1 TANK ENGINE ACQUISITION OVERSIGHT

Dr. DELAUER. "I have a document here that can establish for the record when I sent a memorandum to all concerned defining exactly what role the Office of Secretary of Defense for Research and Engineering should play."

CORRECTION. Testimony was in error. The document was written and signed by Dr. DeLauer, but subsequently was never distributed. Instead, verbal instructions were provided to the Army resulting in incomplete communications.

SOVIET DEPLOYMENT OF MISSILE SUBMARINES

Senator **RUDMAN**. One other question. Your counterpart in the Soviet Union, Defense Minister Ustinov, announced last week that in response to our deployment, they were stationing or had on station more nuclear ballistic missile submarines off our coast.

Are you greatly concerned about this new threat that the Soviets talk about, that they have more submarines off our coast?

Secretary **WEINBERGER**. Senator, it is only a new threat in terms of rhetoric. It is like saying, we will do something in 1975 to retaliate against what you might do in 1984. These submarines have been here for years. They are in and out. The ones that they are talking about do not present an added threat to the United States, and they have the capability that they have talked about for a very long time.

This specific language of Marshal Ustinov is simply rhetoric designed to bolster their current campaign which is to try to show how terrible it was for NATO to deploy a few missiles in December to respond to 380-plus SS–20's that have been going in since 1977, and in effect carrying out what NATO said it would do in 1979.

They have concentrated their entire efforts in trying to block deployment. They refused to negotiate seriously in any way, on any of these levels that I mentioned. When they lost the fight, and NATO went ahead with the deployment, they began issuing these essentially empty threats. They are only saying that they would do what they did do and have done for at least 15 years.

Senator **RUDMAN**. As a matter of fact, even if there were some additional deployment of their ballistic-missile submarines, in terms of the quantum change in the threat to this country in terms of total forces on both sides, it is meaningless.

Secretary **WEINBERGER**. I think so.

Senator **STEVENS**. Senator D'Amato.

Senator **D'AMATO**. Thank you, Mr. Chairman.

DECLASSIFICATION OF SOVIET THREAT TO UNITED STATES

Mr. Secretary, the chairman of this committee has argued many times in the past that we should consider declassifying more specific information on the various threat that the Soviet war machine poses to this Nation.

The old arguments that overhead imagery or satellite pictures cannot be released for publication because once one piece of that imagery is declassified, the door is open through the Freedom of Information Act to request additional release have now become moot because two items of overhead imagery were published in the House Armed Forces Committee hearing record.

My question is, should we not release some of that information to the American public and declassify it, so that rather than us getting into these arguments that this is just simply the administration's rhetoric about the kinds of military buildup that the Soviet Union is undertaking, we can clearly present to the American public those facts that you have stated to us in classified hearings.

Secretary **WEINBERGER**. We have declassified, and the intelligence community, at my urging, has declassified as much as they think they can. The fact that a congressional committee publishes something is not a reason for declassifying a whole category of information.

We have published three editions now of "Soviet Military Power," which represents the maximum amount of declassification, and a bit more than the intelligence community feels can be made. It represents, I think, very clear and convincing proof of the kind, character, rapidity, and dangerous nature of the Soviet military buildup.

We continually try to get as much information as we can before the public. I think we have declassified more in this administration in the last 3 years than has ever been declassified in the past in the form of substantive information, particularly about the Soviet threat. I certainly don't feel qualified to tell the intelligence community what can and should not be done. I urge that they do the most possible consistent with their protection of sources and methods. I think that the "Soviet Military Power," particularly this latest edition, represents that maximum.

SOVIET VIOLATIONS OF ARMS-CONTROL AGREEMENTS

Senator D'AMATO. Mr. Secretary, again, I am concerned by the fact that many of the statements that the administration puts forth are being challenged. For example, the President, in his message of January 23 of this year, indicated that the Soviets had violated various arms-control agreements. His statements, unfortunately, have been criticized as offering little real evidence for the charges.

Don't you believe that if the American public would have the opportunity to see more of that information, and have more of it declassified, the evidence would be overwhelming and therefore build the kind of public support necessary to go forward and support the kinds of requests that you, General Vessey, and other members of this committee feel are important.

Secretary WEINBERGER. We certainly don't have any problems with the idea of declassifying just as much as we possibly can. There was an ample amount declassified to support the President's statements of violation by the Soviets. We continue to press the intelligence community, but again I don't feel qualified to overrule them when they tell me that their sources, methods, and their ability to gather additional information, which is of vital importance to the national security, are going to be impaired.

We have no disagreement on this. We want to get as much out as we possibly can, because we think that when the American public sees the facts they will make the right decision. We believe they have the maximum amount of information that the people who are specialists, who have devoted their life to this work, think can be released at this time.

It is a changing concept, more of it is released from time to time, but we shouldn't allow the inadvertent or improper release of classified information to be used as an excuse to let everything else go.

Senator D'AMATO. Mr. Secretary, I couldn't agree with you more in terms of the fact that we have to balance these interests of national security as supposed to what we might gain and achieve by way of strength in the defense area if the American public did have great awareness. I am just simply suggesting, No. 1, that our efforts at doing this should be continued.

I also believe that some of the imagery, and I am talking about the satellite picture, very clearly demonstrate the kind of war machinery, the dispersal of it, the size of it, that you are taking over a period of time of what the Soviets are undertaking might be very helpful in bringing a balance to this argument of are we overstating the danger, or are we overstating what the Soviets and their allies are undertaking.

I would urge you to press forward. I think that it strengthens your arguments in terms of what we have to do to be prepared and to keep peace as a result of our commitment of a properly financed military interest.

Secretary **Weinberger**. That is why we publish the "Soviet Military Power" books, and that is why we will continue to publish them as long as we have. That is why we feel that each one of them contain just as much information as possibly that can be released at this given time. Each edition has had more, and the current edition, of which there are a few copies still available, is I think a particularly good example.

General **Vessey**. I would just add one word, if I could.

Senator **D'Amato**. I would urge you to go forward on this because I think that it means a lot more than cartoons.

Secretary **Weinberger**. I would do so in any event.

General **Vessey**. I would add one word, Senator. Nobody has badgered as much as this Secretary has to get that information released.

STARRETT CASE

Senator **D'Amato**. He is not exercised by Starrett and I am. I want to put this into the record because it is one thing to protect a person's constitutional rights, and I think that they should be. He has the Merit Protection Board to appeal to. He doesn't need the Department of Defense plus the Board, he has them to appeal to in the event that actions are taken beyond what is required.

Let me put something else in the record, if I might, Mr. Chairman.

If an impeachment charge is going to be brought against me, you wouldn't fire me. That is not a constitutional right, it is a different matter. You do have the ability, but you don't choose to exercise it, to suspend him. I think that the evidence is so overwhelming that it will be borne out that Mr. Starrett and other people who work for him and with him absolutely did the kinds of things that were totally unconscionable and without any justification in this kind of case.

Secretary **Weinberger**. My courteous silence, Senator, should not mislead you into thinking that I am in anything but total disagreement with what I consider to be your very demagogic and erroneous accusation.

Senator **Stevens**. You have both stated your positions very forcefully. Just so we make sure that everyone understands, this is a broad-gauged hearing. You two are the very pinnacle of our defense policy level. Senator D'Amato's questioning about this, this is a broad-gauged question. There is a lot that I would like to ask you about how certain matters affect Alaska, but I am not going to do that.

NATO TROOP REDUCTIONS

I do want to sort of line up with a concept. We are all volunteers on this committee. We can choose any committee we want, and we can change our mind. Some of us have stayed on this committee for a long time. I see policies developing here, two different policies. Senator Andrews mentioned one, and that is NATO.

We have never suggested reducing troops in NATO. We have constantly talked about the increasing commitment to NATO. GAO has told us that 56 percent of all the defense spending in the United States is in support of NATO. We agreed 2 years ago to cap our forces in order to avoid an all-out battle of the Mansfield amendment type, and since that time the numbers have gone up from 315,000 to 322,000, and there is another 4,000 increase here, and we don't count the Navy any more. It is constantly going up.

PERSONNEL COSTS

The other immune area, interestingly, in your reduction—I invite both of you to comment on it, the personnel costs were immune from the reductions. I have had comments about the variable housing allowance. There wasn't a variable housing allowance until 1981. It was intended to present an opportunity to the Department of Defense to assist those people who live in high-cost areas in adjustment in their basic allowance for quarters.

VARIABLE HOUSING ALLOWANCES

It is something that no other people in Government in this country working for the United States get. The people who work in the Pentagon in uniform stand side by side with those wearing civilian clothes, those in uniform get a basic allowance for quarters and then we have the variable housing allowance.

We discovered that there is not one single person in the Washington, DC, area that doesn't get that variable housing allowance, an allowance that was not even in effect 3 years ago. In addition to that, we have discovered that all of the new additions that we have had have become additions to military compensation. The allowances for transportation, the allowance for mileage, we supported each one of those because we thought that they were going to be done on a selected basis.

Now I find that someone in the Department suggested to our friends in the House, at least that is what I am told, that my State does have a different treatment because it is considered to be overseas as well as Hawaii in terms of this kind of allowance. It has a rent supplemental program. Someone said, "Let's put Stevens' State on the variable housing allowance, let it come down to that level."

It means a reduction to the people who are stationed up there, it doesn't mean a reduction to me personally. As a matter of fact, it doesn't affect the people who vote for me. If those people thought they were doing me harm, they have shot themselves in the foot.

IMMUNE AREAS OF DEFENSE BUDGET

It highlights the problem that I am trying to bring out on a general, broad-scale basis. If this committee is going to go to the markup now. NATO costs are immune. We are urged not to touch any of the increases. We are not talking about decreasing things. Any increases for NATO are immune. Any of the increases in personnel—I had a look around there with one of your assistants, Mr. Secretary, on this one—they are immune.

It ends up that we cut procurement, and we cut R&D. We are shooting ourselves in the foot. We worked totally for the modernization program. Now that we have fought the battle of the C–5A, we are asked to cut them back. Now that we have fought the battle of the F–16, now we are asked to cut them back. I fought a battle to stop the tanks from being ramped up, and the submarines from being ramped up, and I lost that battle, and now we are asked to bring them down.

It all relates to the fact that there are two areas of massive immunity in this budget. One is the commitment to NATO, and the other is the extent of personnel costs. We have made no adjustments at all in terms of personnel costs. The Senator from North Dakota said that we are not talking about cutting any person's pay. We are talking about who do we need to expand the personnel at a time like this. You have a request to increase personnel during a period when we are cutting procurement. We are cutting the modernization, but we are asked to increase personnel, and that is immune, Mr. Secretary.

Where is the rationale for this kind of immunity in a period like this? Why should NATO expenses be immune, and why should personnel total cost be immune? Why shouldn't we do what the Senator from North Dakota said, cut back some of these people and replace them with Guard and Reserve people? We would have the same number of people available.

We would have the same number of people in uniform in event of an emergency, yet we might be able to modernize our forces, and not suffer these increased costs. The delay of just two planes in the C–5B is going to increase the whole program, I am sure you will admit that. All of these cuts are going to be reflected in increased costs down stream, and we have the same problem ahead of us in 1987 and 1988. I don't see why we are not making a basic adjustment in the budget that will prevent these same battles from occurring year after year after year.

Let me close this by saying that when I go to the full committee, I go to the full committee with these friends who are obviously interested in defense. Do you notice these vacant chairs? Those votes are not with us, Mr. Secretary, when we go to the full committee.

We start one vote behind on every single dollar we find on this committee. I don't think that you are giving us the ability to find some way to have a long-term success in the modernization program as long as you maintain those two immunity areas.

VARIABLE HOUSING ALLOWANCE

Secretary **Weinberger**. Senator, let me start with the variable housing allowance. We have made recommendations to the Congress that would save $135 million in that program, and I don't think that that is an inconsiderable saving. With respect to personnel, we have tried to minimize the reductions in personnel costs because we think that it is essential that the volunteer system continue to work as well as it has.

Senator **Stevens**. You are talking about increased personnel.

Secretary **Weinberger**. Senator, we need increased personnel in the Navy and the Air Force because we are bringing more ships on line, and more planes so that we do need to staff and equip those new ships and planes with the people to handle them.

Senator **Stevens**. You have a request for 22,000 more people. I am not asking you to cut anyone's salary. I am not asking you to cut their allowance. But 22,000 more people means more variable housing allowance, more personnel costs. We have a request for 4,000 more in NATO in 1985. At the same time, we have to cut back the C-5B, cut back F-16's, cut back submarines, cut back the tanks. There is no balance because personnel did not take one single cut, it has an increase.

Secretary **Weinberger**. Personnel did take a cut, it took a cut just in this one item alone.

Senator **Stevens**. Overall, Mr. Secretary, there is no decrease in personnel.

Secretary **Weinberger**. We very consciously tried not to make major reductions in personnel costs because we do not want to interfere with the success that we have had in attracting more and more people to the Armed Forces.

Senator **Stevens**. Mr. Secretary, the increase is because you want more people, not because you are cutting the allowances to anyone.

Secretary **Weinberger**. Senator, we want more people because the Congress properly approved and authorized that we buy more ships and more planes. It is, if I might say so, not very sensible to get those new ships coming off the line, and those new planes coming out of the factories, and not be able to man them.

This goes back again not to a situation we like, and not to a situation we want, but a situation that is. We have to regain the deterrent strength, and the way you do that is by building back up the fleet which had been reduced to well under 400 ships. We have to get not only the equipment and the ships themselves, but we have to get the crews to man them.

There is a very small increase proposed for the Army. The increase in NATO is to handle the deployment of the cruise missiles and the Pershing II. But we do not see any situation in Europe which would indicate that we could safely hold back troops and substitute a paper commitment of National Guard or Reserve that are not in place. Your deterrent capability depends on what the Soviets perceive as our responsive capability to their attack.

REASONS FOR PERSONNEL INCREASES

Senator STEVENS. Mr. Secretary, in all of these papers out there, these things are circulated all over the country that say, "Stevens has suggested another cut in military pay." I want you to be honest with me. I am not talking about reducing anyone's pay. I want to know why you need to increase the numbers of the Department of Defense.

Secretary WEINBERGER. I have tried to explain, Senator, that it is because the equipment that we have and we need, that Congress has approved, is coming on line and needs to be manned.

Senator STEVENS. I feel like the guy who must have been the advisor to someone somewhere along the line at the time they discovered gunpowder and someone decided to retire the crossbow, and came along with blunderbusses. The king's advisor said, "If you do that, you are going to put half of the people out of work. We are going to have both the crossbow and the blunderbuss, and to hell with the costs."

Secretary WEINBERGER. We are not in the least interested in treating the Department of Defense as a jobs program, Senator.

Senator STEVENS. That is what it is turning out to be.

Secretary WEINBERGER. The very fact is that we have at this moment people lined up for all of the services who are waiting to get into the services.

Senator STEVENS. Why not?

Secretary WEINBERGER. You certainly wouldn't want to have ships that couldn't sail, or planes that could not fly coming out of factories in response to our needs.

WAGE INCREASES IN U.S. SINCE 1970

Senator STEVENS. Since 1970, the wage increases in the United States have been 183.4 for military, 156.5 percent for postal unions, 144 percent in the private sector, and 114 percent for Federal civilians and, if it is of any interest to the rest of the public, 62 percent to the Congress. [Laughter.]

Secretary WEINBERGER. But you have to look, Senator, at the base from which these increases came.

Senator STEVENS. You are talking to the guy who had a 62-percent increase since 1970, and you are asking for 5.5 again for the military, you are asking for 22,000 more people, and you have asked us to cut off jobs all over the procurement area, whether it is AMRAAM, F-16's, or anything else. There are going to be reductions in employment out there in the private sector. You have a jobs bill, Mr. Secretary.

Secretary WEINBERGER. The reductions that we are talking about, Senator, are reductions in the rate of increase that we would prefer to make in the interest of national safety and security. We have made reductions in some of those, but still provide for a very large amount of employment. You have to bear in mind that when you cut the defense procurement by $13 billion, you lose about 35,000 jobs for every $1 billion of procurement.

FUNDING TO NATO

Senator **Stevens**. I see no reason why NATO is getting 56 percent of the current expenditures of Federal dollars from the United States. We are outspending all other NATO partners put together, and we have been for some time. That is from the GAO study, and I will be glad to share it with you.

Secretary **Weinberger**. Senator, it is unfortunately incorrect as many of them are. We are not outspending them, and we do not contribute more men and more equipment than many of the other NATO nations put together. When you say that it is for NATO——

Senator **Stevens**. According to your report, Mr. Secretary, we spend $189 billion in 1982 compared to $103 billion for all U.S.-non-NATO. I am sure that I am going to read in the London Times again that we are suggesting reducing troops in NATO. We are not, but we are suggesting that you not increase them by 4,000. We are suggesting that you not increase the uniform services by 22,000.

It does seem to me that when we have been asked to make all of these other cuts that we have a legitimate right to say to you, and to say it to you again, you have got to find a way to use more Reserve and National Guard, and you have got to be prepared that we are going to apply some of these cuts to personnel. We are not going to increase the personnel in the manner that you suggest.

Secretary **Weinberger**. There is not much point in putting the cruise missile and the Pershing in Europe if we don't have the people to make them. The deterrent capability is gained by both the weapons and the trained manpower.

Senator **Stevens**. When we got host-nation support, we were supposed to release some of those people so that they could man these other things.

Secretary **Weinberger**. They were to do very different duties, Senator, than that.

Senator **Stevens**. We are just talking about numbers.

Secretary **Weinberger**. We are talking numbers, but they are not interchangeable.

Senator **Stevens**. I understand that they are not interchangeable.

Secretary **Weinberger**. They are not fungible.

Senator **Stevens**. Then we don't need the 4,000 increase over there.

Secretary **Weinberger**. We do need the 4,000 increase because we can't give up some of the forces that are already insufficiently manned without considering the ground-launched Cruise missile for the Pershing. That is what the entry in NATO is for. The increase at home is because there are more planes and more ships to be manned.

Senator **Stevens**. Senator Andrews has another question.

IMPORTANCE OF NATO DEFENSE TO UNITED STATES

If we follow your recommendations on the reduction pattern, I predict, if we really examined the budget for 1985, we would find that better than 60 percent of the defense budget of the United States is spent on NATO, one area of the world. We are presuming that the defense of NATO is, per se, the defense of the United States.

Secretary **Weinberger**. It is indeed the defense of the United States.

Senator **Stevens**. The major threat against the United States is a threat against Europe.

Secretary **Weinberger**. It is one of our highest priorities as indeed it has to be. We also have very heavy expenditures in Korea, in Japan, in the Mideast, and a number of parts of the world where this threat is posed against us. It is not a threat we sought, and it is not a threat that we like, but it is there and we can't really blind ourselves to it.

Senator **Stevens**. I hope we all remember that the biggest threat for the United States is the United States. The potential of an attack against this country is what is really being neglected when we increase the concentration of attention of our defense forces in Europe.

Secretary **Weinberger**. It is not an increased concentration, Senator. It is a very large part of our forward-based defense, and I think that it is absolutely essential to do it. I also think that it is essential to do forward-based defense in other parts of the world.

I believe that the distribution of what we have is adequately placed. I would like to ask General Vessey to comment on that because this is, of course, a matter within their purview also.

General **Vessey**. I would say, Senator, regarding the business of using the Guard and Reserve that since 1981 the Guard and Reserve have been increased by 106,000, if the increases stand through fiscal year 1985 in the budget. The budget for fiscal year 1985 calls for an increase of 44,000 in the Guard and Reserve. The strength of the Guard and Reserve has been increasing far more dramatically than the strength of the Active Forces.

In NATO, as in everywhere else in the world, as you said, our No. 1 priority is the defense of the United States. Lowering the nuclear threshold by increasing our conventional combat power, at the same time maintaining our nuclear deterrence—I believe that the programs we have are reasonably well balanced to do that.

Senator **Stevens**. Senator Andrews.

Senator **Andrews**. Given the deficit that we have, Cap, you ought to realize that this committee has the responsibility for systemic reform of the military. You may not believe it, you may not understand it, but it has to come.

The warranty legislation we cranked out of here was the first systemic reform in the last three decades of the military. What Senator Rudman suggests he is going to come out with in another 90 days will be another piece of basic systemic reform.

PERSONNEL COSTS

The chairman and I have been talking about personnel costs. What you do with the Guard and Reserve goes back to what a Secretary by the name of McNamara started to do back in Southeast Asia. His idea was to gut the Guard and Reserve. Some of us think that it is time to go back.

Mr. Secretary, you point out what are we going to do with these additional planes that are coming on board, we don't need more bluesuiters in the Air Force. Give those airplanes to the Guard until the Guard is equipped. It is a lot more cost effective, and it is going to work to address not just the defense of this country, but also addressing the question of the deficit.

There are the things that we are trying to tell you. These are the things we want to do to get the most, so that we can put a sensible package together. We would like to hear the suggestions you have along that line.

Secretary **Weinberger**. Senator, as General Vessey has said, we have an increased Guard and an increased Reserve, and we are delighted we have. We are equipping them with the very latest equipment. But it is not an either/or situation. When you look at the total Army, the total military forces, the Guard, Reserve, and Active, you see that there is not nearly enough to do the things that we have to do in the various parts of the world.

It is a very expensive and a very unpopular task, and I know that better than anybody, but it has to be done. I know that everybody is worried about deficits, and I am, too. But I take great comfort in the fact that it is not defense spending that adds to the deficits. Defense spending generates jobs, and jobs raise tax revenues. What you cut defense spending, you lose jobs.

This is not a reason for doing it. This is not a jobs program. But I think that you should understand that it does not have the effect on deficits that everybody assumes, or that other types of spending have.

Senator **Andrews**. Thank you, Mr. Secretary.

General **Vessey**. Could I say one word, Senator Stevens?

Senator **Stevens**. Sure.

REFORMS IN MILITARY

General **Vessey**. You said that there had been no reforms or changes in the military. I just want to tell you, Senator Andrews, that there have been drastic changes in tactical concepts, in the ability of our services to work together, the ability to use modern technology and to get far more capability out of it.

The ability of the services to work together to eliminate duplication and overlap has improved. We have not spent a lot of time putting it in the newspapers, but there is a lot going on, Senator.

Senator **Stevens**. We are in real trouble. We are your gladiators here. We fight for your budget. We have these feelings about these budgets as we watch them year in and year out.

I don't know how many Secretaries of Defense I have listened to in the last 16 years, but you are the best, Cap.

Secretary **Weinberger**. Thank you, sir.

Senator **Stevens**. I wish you would listen a little bit. [Laughter.]

SUBMITTED QUESTIONS

The committee will submit a number of questions which we will ask you to answer for the record.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

ADDITIONAL COMMITTEE QUESTIONS

Budget Revision Impact

QUESTION: Do you have any specific program reductions that might illustrate your point that restricted defense spending is undermining our ability to counter the Soviet threat to our national security?

ANSWER: The reductions slow our modernization efforts and our efforts to improve readiness and sustainability. As a result they undermine our ability to counter the threat. However, I do not want to get into specific examples because those examples might be construed as a priority listing. As you know the forces, and thus the resources, have to be balanced in a way that produces the maximum effectiveness at whatever resource level is available. For that reason, we try to avoid lists that might be taken as balanced requests for increases, or reductions but which are neither. You have before you a carefully balanced request. I understand your desire for specifics, and I trust you understand my reluctance to provide them. I hope it will suffice for me to say that we could better counter the threat, were we more sustainable, able to train more, be more mobile, and armed and equipped with better weapons.

Commitments and Restraints

Our global commitments are expanding, as you know, while our budget goals appear to be shrinking. How can we control those commitments and tailor them to the reality of our restraints?

ANSWER: First, allow me to answer a question with a question. What is the alternative for a nation that has worldwide vital interests and global responsibilities? To those who say our strategy is too ambitious, our commitments too widespread, I would ask what we should give up, what treaties should we repudiate, which friends and vital interests should we abandon?

Secondly, the Reagan Administration should not be faulted for an "abyss between aspirations and resources," for that is exactly what we found when we arrived in Washington three years ago. For example, President Reagan's predecessor declared the defense of Southwest Asia, as a US vital interest, a region far from US shores but within striking distance of Soviet bases in Afghanistan.We do not refute the statement that the US has vital interests in Southwest Asia, yet we had inadequate means of transporting forces there quickly, insufficient support forces and war reserves to sustain operations, and inadequate readiness to fight even if we could get our forces there on time. This Administration has been working hard to rectify the commitment-capabilities mismatch."

Thirdly, knowing that we are faced with expanding commitments and shrinking budgetary resources, we can adjust our strategy accordingly. This includes placing emphasis on collective security in conjunction with our allies, forward deploying US forces, and structuring our forces to be prepared to cope with threats across the entire spectrum of conflict. In addition, our strategy must look to the future and promote long-term initiatives that will contribute to our nation's security for years to come. Overcoming the "commitment-capabilities mismatch" will require a long-term sustained effort.

SENATE REDUCTION ON MX MISSILES

QUESTION: The Air Force has said a minimum of 30 MX missiles must be procured in 1985 to avoid disrupting the current missile deployment schedule. How would the proposed Senate authorization allowance of 21 missiles affect this deployment schedule?

ANSWER: The original deployment schedule required 30 of the FY 1985 Peacekeeper procured missiles to sustain a steady rate of deployment of 2.5 per month. If only 21 missiles were available for deployment and no surge in deployment rate is made in subsequent years, the full operational capability will slip by two months.

COMMENT ON CONDITION IMPOSED BY HASC

QUESTION: The House version of the authorization imposes several conditions on MX production funding. Please comment on those conditions. Can you live with any of them?

ANSWER: The thrust of the House FY 1985 Peacekeeper authorization language is to interrupt the beginning of the missile production line for at least six months. Then, missile obligation authority will be subject to the outcome of the joint resolution process. Thus, even after more than half the fiscal year will have passed, commitment to near-term ICBM modernization will still be in doubt.

The procurement of missiles in FY 1985 must be placed in the proper perspective. Procurement does not necessarily mean deployment. A deployment decision for FY 1985 missiles need not be made until after the missiles come off the 2-1/2 year production line. If the missiles are not to be deployed, they can still be used as test assets. Thus, the House language forces a 1987 deployment decision to be made in 1985.

REASSESSMENT OF MX IOC

QUESTION: There is substantial concurrency in the MX military construction program. Moreover, MX developmental flight testing continues past the December 1986 IOC date, and continues on into calendar year 1987. What technical problems could arise that would cause you to reassess holding the December 1986 IOC?

ANSWER: The only concurrency in the Peacekeeper military construction program is associated with the Assembly, Surveillance and Inspection facility at F.E. Warren AFB, Wyoming. Latter flight tests involve operational system verification by AFOTEC (the operational test and evaluation center) and SAC (the using command). After five successful RDT&E flight tests and extensive ground testing, there is no indication that severe anomalies will occur during testing that could impact the December 1986 IOC.

REDUCTION IN MX DEPLOYMENT COSTS

QUESTION: The current authorization levels for the MX reduce the number of deployable missiles between 30 and 50 percent. Why isn't it safe to assume that the $1.2 billion requested to support deployment can be similarly reduced?

ANSWER: The FY 1985 current authorization levels reduce the number of deployable missiles, not basing and support. The funding requested to support deployment provides basing for the missiles procured in FY 1984. The funds requested to support deployment are required to meet the IOC of December 1986.

FLYAWAY COSTS OF 15 AND 21 MISSILES

QUESTION: The Department's appeal letter to Senator Tower noted that House did not properly cost the reduction of the 10 missiles proposed. What is the total recurring flyaway cost of 15 and 21 missiles in FY 85?

ANSWER: The total flyaway costs for 15 and 21 Peacekeeper missiles in FY 1985 are:

(Dollars in Millions)

Quantities	15	21
Flyaway		
Propulsion	461.3	546.5
Guidance & Control	435.5	486.5
Reentry Systems	205.2	255.0
Subtotal	1102.0	1288.0

IDENTIFY SPECIFIC EQUIPMENT AND SERVICES

QUESTION: Identify the specific equipment and services being procured for each of the sub-entities for the "Other Weapons Systems" and "Support" cost categories on the MX Peacekeeper P-12 system cost analysis display.

ANSWER: "Other Weapon Systems" consists of the following:

- Instrumentation and Flight Safety Systems which are required for all operational flight test missiles. The instrumentation provides data to monitor performance and for trouble-shooting should anomalies occur during the actual flight. The flight safety system is required to insure the missile can be destroyed should an anomaly occur which would endanger human life or property during the mission.
- Mechanical and Transportation and Handling consists of the transportation vehicles and handling equipment such as the stage transporter, the emplacer, cranes and other special purpose vehicles; the canister which will be emplaced in each of the 100 modified Minuteman silos at Francis E. Warren AFB WY; the shock isolation system which will be placed in each of the sites to maintain the existing hardness level of the silos; and the environmental control system required to

maintain the proper temperature and humidity levels within the silo and canister.

- Electrical includes the ground power system, which includes batteries and specialized power for the electronic equipment within the launch control center and the silo; launch control system including hardware and software modifications to the 10 launch control centers; modifications to accommodate the Peacekeeper system within the overall existing airborne launch control system; and the physical security system which will have hardware and software modifications for compatibility with the Peacekeeper system.
- Nuclear Hardness and Survivability includes equipment to validate the hardness levels of the production hardware.

The "Support" area consists of the following:

- Logistics refers to the integration of requirements at a system level to include systems engineering functions at Hill AFB for the system when deployed.
- Training Equipment consists of crew training equipment for operations and maintenance trainers which simulate the launch control centers, the launch facility and the reentry systems.
- Technical Pubs include technical orders, engineering data and technical assembly drawings for operations and maintenance functions after deployment.
- DSE/MSE refers to the acquisition and fabrication of Depot Support Equipment at Hill AFB and other supporting Air Logistics Centers and Maintenance Support Equipment to be used at F.E. Warren AFB.
- A&CO/Support refers to the Assembly and Checkout of all the subsystems when a Peacekeeper missile is first deployed, and integrated logistics support for the development of hardware required to ensure the system is supported when deployed.

STRATEGIC DEFENSE INITIATIVE

QUESTION: Have you considered putting more emphasis on those technologies which are furthest along right now, so that they could be more rapidly developed and deployed as the first sequence of an SDI system that is phased-in over time? Why do we have to wait 5 years, and spend $26 billion to make these decisions?

ANSWER: The SDI program has been structured to provide options against potential near term threats. It is, however, also structured to establish the feasibility of concepts capable of meeting not only near term threats but also ones that are responsive to the appearance of defenses and are designed to reduce the defense effectiveness. For example, decoy discrimination and boost phase intercept--two important approaches to meeting a responsive threat in all deployment options--require major advances in technology.

SMALL ICBM BASING MODES

QUESTION: We find growing support in Congress for basing the small ICBM only in a mobile mode. Mobile basing is the most expensive in terms of annual operations and support costs.

The basing decision ought to be a technical one, not a political one.

Is the Department preparing to conduct a competitive evaluation of alternate basing modes for the Midgetman?

ANSWER: The Department is continuing to evaluate both mobile and hardened silo basing modes. The final decision will be made based upon cost and mission effectiveness. This decision will be made before Full Scale Engineering Development begins in late 1986 or early 1987.

ACCELERATION OF SMALL ICBM

QUESTION: In view of growing Congressional resistance to the MX system, one alternative may be accelerate the small ICBM.

How feasible would it be to attempt to advance the current 1992 initial operational target for Midgetman?

ANSWER: The IOC date cannot be accelerated without taking major technical risks. The current program is designed to determine the feasibility of both hardened mobile launchers and very hard silos before Full Scale Engineering Development begins and then perform a cost and mission effectiveness evaluation as a basis for selection.

Any significant acceleration of the currently planned IOC date would preclude us from fully evaluating all aspects of the two alternative basing modes.

STRATEGIC DEFENSE INITIATIVE

Question: Specifically how would an eventual reduction of $200 or $300 million impact SDI program goals?

Answer: If such reductions are taken in the basic level that we propose, we have two choices: (1) to slow down the schedule which could result in greatly slowing down our drive to provide the technology to support defensive options for the President and the Congress by the early 1990s, or (2) we could change the thrust by abandoning the pursuit of some concepts and strategy options which would greatly increase the risk of completing the technology development of this research phase by the early 1990s.

Question: When the final authorization allowance for SDI is determined, will the Department be prepared to submit revised program goals and priorities to this committee?

Answer: Yes, the Department will be prepared to submit revised program goals and priorities when the final authorization allowance for SDI is determined.

COMPETITION BETWEEN BASING MODES

QUESTION: There seems to be a growing consensus among many in Congress that the small ICBM should be based only in a mobile mode which tends to have the highest personnel and operations and support costs.

Now, as we understand it, the small ICBM program includes a side-by-side technical evaluation of hard, mobile basing against hard silo basing. Is it the policy of the Department that there should be a competitive evaluation of these two basing modes?

ANSWER: Yes, the Department is continuing its side-by side technical evaluation of both approaches. This evaluation will continue through 1986 when a selection will be made for Full Scale Engineering Development.

IMPACT OF FUNDING CUT

QUESTION: Last year Congress cut the silo hardening program in half, which caused deletion of some sub-scale demonstrations of that technology.

If silo hardening is cut again, would that preclude a full and fair evaluation of it as a possible basing mode for the small ICBM? Would that tend to lock us into the hard mobile launcher option, which is the more expensive of the two?

ANSWER: If silo hardening funding is cut again it will be impossible to make a valid comparison between the hardened mobile launcher and silo hardening as planned in 1986. We would not recommend proceding with Full Scale Engineering Development until the comparison could be made. The 1992 IOC would therefore, be impacted.

MOTIVE FOR HARDENING PROGRAM

QUESTION: Is your top priority on this program to get an early IOC for the missile? Could that guidance lead us down the wrong technical and operational paths for the basing mode?

ANSWER: The Congress directed a 1992 IOC. To meet this goal requires a rigorous evaluation of the significant technical and operational issues involved in the two basing modes under consideration. These issues must be resolved by 1986 so that we can proceed with full scale engineering development and meet the 1992 IOC.

SUPERHARDENED SILOS

QUESTION: Could superhardened silos for the small ICBM be made to be survivable and thereby decrease the total basing and O&M costs? Are you considering multiple basing for the small ICBM?

ANSWER: Our early test data indicate that superhardened silos may indeed be a feasible approach. Per the recommendation of the President's Commission on Strategic Forces (Scowcroft Report), we are evaluating multiple basing modes as a potential option.

Procurement Reductions

Question: Mr. Secretary, last year this committee unsuccessfully recommended holding M-1 tank production at 720 per year and keeping nuclear attack submarine construction at 3 per year. The budget revisions now adopt both those recommendations, but the authorization process is already busy authorizing increased procurement.

Will the Department continue to support these procurement cutbacks under the current defense spending restrictions?

Answer: To assist in reducing the Federal deficit, the Department reluctantly agreed to make the reductions contained in the FY 1985 budget revision. The Department will continue to support those cutbacks.

Question: Will the individual Services support the Department in this area or will we be getting mixed signals again from the Pentagon?

Answer: The individual Services support the FY 1985 revised budget.

. Reevaluation of Force Level Objectives

Question: In view of Congressional restraints being imposed not only on 1985 but on 1986 and 1987 defense spending targets, is the Department reevaluating current force level objectives such as 15 carrier battle groups, 40 tactical fighter wings and 17 Army divisions?

Answer: The Department of Defense annually conducts an in-depth review of its plans and programs including military force levels and structure, their combat readiness and sustainability and the modernization of these forces. These reviews assess the present and projected threats to U.S. national interests, account for the fiscal limits imposed either by the Executive or by Congress and address the affordability and executability of these plans and programs.

We are presently reviewing program proposals for Fiscal Year 1986 and will complete this review prior to submission of the President's budget in January 1985. All current force level goals are being evaluated in that review, as they are annually.

Supportability of Force Level Objectives

Question: Will it be possible to support these objectives adequately at lower budget levels in the out-years?

Answer: These specific force level objectives--15 carrier battle groups, 40 tactical fighter wings and 17 Army divisions--

remain in our defense plans. Based on our assessment of defense programs--including the competing demands of strategic nuclear forces modernization, readiness and sustainability, to name only two--we believe these specific goals can be attained and supported, even at lower budget levels in the out-years than we had planned for previously. Obviously, defense budgets can be reduced to a level where we would be forced to back away from these objectives. As of now, the reductions we have sustained thus far, including the agreement between the President and the Senate Republican leadership on FY 1985 through FY 1987 defense spending, do not preclude supporting those force level objectives in the out-years.

C-5/C-17

QUESTION: The budget revisions propose deleting two C-5Bs in 1985 and two more in 1986. Won't this kind of a stretch out create a production traffic jam in later years?

ANSWER: No. Slipping procurement of 2 C-5Bs from 1985 and 1986 to 1987 has little impact on actual production. The following chart illustrates this fact by showing the original and revised (slipping 4 aircraft) delivery schedules.

Delivery schedule based on a buy profile of 1-4-10-16-19 (FY 83 to FY 87 respectively) is shown on line 1 and a 1-4-8-14-23 delivery schedule is on line 2.

		QUARTER				
FY	LINE	1	2	3	4	TOTAL
86	1	1	2	1	3	7
	2	1	2	1	3	7
87	1	2	3	4	3	12
	2	2	3	3	3	11
88	1	3	6	6	6	21
	2	3	3	6	8	20
89	1	6	4	0	0	10
	2	7	5	0	0	12

The revised profile does not cause a production jam in the latter years of the program. The first delivery (Dec 85) and last delivery (50th - Feb 89) are the same. One fewer aircraft is delivered in FY 87 and FY 88. These two aircraft are delivered in FY 89.

Affordability of C-5 & C-17 Aircraft

Question: Fifty C-5s are projected to cost $9.2 billion to acquire. The estimate for 210 C-17s is $35.7 billion. Under the current budget crunch, can we really afford both of these acquisition programs?

Answer: We feel certain that we can afford both of these programs, in view of urgent needs for increased airlift capabilities which they will provide. The procurement of 50 C-5B aircraft is under a firm fixed-price contract which offers the best approach to meet the most urgent near-term requirements. Major procurement funding of the C-17A is planned to begin in the late eighties, phased to avoid the current budget crunch, and to provide needed further increased airlift capabilities in the longer term.

Priority of C-5B and C-17A Aircraft Programs

Question: Mr. Secretary, what has your highest priority -- a successful C-5B program or a successful C-17A program?

Answer: Both programs are currently assigned highest priority in the DOD airlift programs. We decided in FY82 to acquire 50 C-5 aircraft as the best approach to provide an urgently needed near term increase in intertheater airlift capability. At that time we also initiated a limited R&D program for C-17 to preserve an option for its future development and acquisition to meet our long-term airlift requirements. Our request for funds to initiate in FY85 full scale development of the C-17A is in accordance with this plan.

Helicopter Development

Question: The Department has under development the JVX, the LHX, the HH-60, the carrier inner zone helicopter, and DARPA's X-wing program — plus some classified activities.

Can the military really afford all that complex and often redundant helicopter development?

Answer: These programs were extensively reviewed by the Defense Resources Board prior to their inclusion in the President's Fiscal Year 1985 Department of Defense Budget. That review clearly showed that these programs addressed quite different mission requirements, different time periods and were not at all redundant.

The JVX is a 35,000-pound class aircraft capable of carrying a payload of some 10,000 pounds or 24 troops at speeds up to 300 knots. The program aims to acquire slightly over 900 Vertical/Short Take-Off and Landing (V/STOL) combat transports for the Army, Navy, Air Force and Marine Corps with the Navy as the executive Service. Funding for the development of the common weapons system, which includes airframe, engines and core avionics as well as developmental testing, has been consolidated within the Navy's budget by the Congress for Fiscal Year 1984 and by the Department of Defense for Fiscal Year 1985 and subsequent years. Funds for Service unique mission equipment, such as radios, operational testing, and out-year procurement, are included as appropriate in the various Services' budgets. JVX will fill the requirements for globally self-deployable combat transports for Marine Corps' assault, Navy's multi-mission, Army's medium cargo and aeromedical evacuation, and Air Force's long range special operations force transport applications. JVX is not a helicopter development; rather it is a V/STOL tilt rotor transport which blends helicopter-like hover performance with the speed, range, and high productivity normally associated with turboprop transports. JVX is paced by the urgent Marine Corps need for Fiscal Year 1991 deliveries to avert a critical shortfall in existing assault medium lift capabilities. JVX received approval for concept and requirements formulation in December 1981 and approval for the current Preliminary Design phase in December 1982. Decision on Full Scale Development is scheduled for mid-1985.

LHX is about one fourth the size of the JVX and will replace the current light helicopter fleet of the Army. The LHX is being designed as a 8,000-pound class aircraft with several mission-unique configurations - (1) a light utility version capable of carrying up to six troops or 2000 pounds of cargo, (2) a scout/attack version capable of carrying some 700 pounds of armament. Both figures are for a hot-day, high altitude (4000'/95°) operating environment, a capability that is lacking in the current light helicopter fleet. The LHX will replace the aging UH-1, AH-1 and the OH-6/58C fleets and constitute the lower capability portion of the Army's helicopter fleet complementing the more capable UH-60's and AH-64's.

The HH-60 will meet the Air Force's need for Combat Search and Rescue helicopters. It uses a modified Army Blackhawk airframe which incorporates Navy Seahawk dynamics and an Air Force mission suite. Deliveries will fill Air Force Combat Search and Rescue inventory shortfalls in the near term.

The CV ASW helicopter will meet the Navy's need for a carrier-based anti-submarine warfare helicopter capable of locating and identifying enemy submarines in the high noise environment of the Carrier Battle Group's inner ASW zone. It will also be capable of threat elimination using various weapons. Source selection for the CV ASW helicopter will occur during Fiscal Year 1985 following competition between existing helicopters which may include the Sikorsky SH-60F model which already incorporates the T700-GE-701 engines, the Kaman SH-2 re-engined with T700-GE-701's, and possibly a model of the Westland-Augusta EH-101 aircraft. Deliveries will fill Navy CV ASW inner zone requirements in the near term and through the 1990's.

The X-wing program is an advanced aerodynamic technology demonstration effort, a proof-of-concept with mission application, if successful, some decade or so away.

Thus, each of these programs has a vastly different purpose and there is no redundancy. The issue of affordability, of course, is one that must always be considered. As any other program, these programs, too, compete with the other demands for the Department's budget and, if successful, receive funding which effectively confirms a system's affordability given the priority of the mission and alternative ways of meeting the need.

Question: None of these efforts at this time are true joint programs. Even the JVX is no longer a joint effort.

What is being done in the Department to coordinate all this development and why can't more of these programs be consolidated into money saving joint programs?

Answer: JVX has been a joint program since its inception by virtue of the fact that all four Services have been involved. While JVX RDT&E funding was originally split among the three Service budgets, the differing urgencies of their needs led Congress to consolidate funding in the Navy's line, as it had the highest priority and urgency for this aircraft. Procurement plans are for a total of 913 common JVX aircraft: 552 Marine assault transports, 231 Army medium cargo and aeromedical evacuation aircraft, 80 Air Force long range Special Operations Force transports, and 50 Navy multi-mission aircraft with potential for wider application and larger procurement quantities.

LHX is currently in the concept definition stage as an Army light scout-attack and utility aircraft family design. It is likely to become an aircraft that will have multi-Service applications. In anticipation of that, certain Navy requirements such as dual engine design and marinization, are to be part of the basic design.

The HH-60 is an outgrowth of the Army's UH-60A Blackhawk program, as was the case for the Navy's SH-60B Seahawk LAMPS Mark III outer zone ASW helicopter. These aircraft are basically joint acquisitions as they are using largely common major components which has significant logistics and cost benefits. The CV ASW inner zone helicopter is being competed and may become an outgrowth of either the SH-60B (as an SH-60F), the SH-2, or the EH-101 helicopter; if the SH-60F were selected, the CV ASW helicopter would become part of the H-60 series acquisition.

While the programs may not have joint Service day-to-day management during development, they are pursued with cognizance of the other Service's needs and requirements so that in production multi-Service participation can be effected with minimal airframe modifications. Thus, by averting duplicate developments and by gaining logistics commonality savings are achieved.

Question: Which of these programs - JVX, LHX, HH-60, CV Helo or X-wing - is your lowest priority?

Answer: The JVX, LHX, HH-60, CV ASW inner zone helicopter, and X-wing are all high priority Defense programs with differing purposes, schedules and urgencies. The JVX is an ongoing development which meets the urgent Marine Corps need for globally self-deployable, high speed assault transports whose deliveries start in Fiscal Year 1991 to avert a critical shortfall in assault medium lift which is occurring due to peacetime attrition of their old aircraft; JVX program will procure over 900 aircraft for all four Services, with a potential for larger quantities. The LHX has a high Army priority because it is needed to replace an aging and increasingly expensive-to-operate fleet of light helicopters like the UH-1, AH-1 and the OH-6/ 58C. The potential procurement quantity for the LHX family of light scout-attack and utility helicopters may approach 5,000 with initial deliveries projected for the early 1990s.

The HH-60 and CV ASW helicopters will meet near term schedules. The HH-60 meets an urgent Air Force need to fill existing Combat Search and Rescue helicopter inventory shortfalls. The CV helo will provide modern CV-based ASW helicopters, replacing the 1960 vintage SH-3; it fills an urgent Navy need for inner zone ASW submarine protection for the carrier battle group.

The X-wing is a technology demonstrator that must begin now in order to ascertain its potential for future missions; in terms of urgency, it perhaps is, the least urgent as it does not directly lead to the fielding of needed hardware.

Question: JVX development costs will exceed $2 billion, and total program costs will exceed $33 billion, in then year dollars.

Are you convinced that the JVX is affordable? Will it really add that much to the capabilities of the Marine Corps?

Answer: As indicated by the Navy's JVX Selected Acquisition Report, JVX is estimated to cost, in then year dollars, $2.491 billion in development and $33.4 billion for the procurement of 913 aircraft for all four Services. In today's (Fiscal Year 1984) dollars, that translates to $2.1 billion in development and $20.0 billion in procurement at an average flyaway cost of about $14 million. We will have aircraft that self-deploys over 2100 nautical miles, enabling our conventional and special operations forces to rapidly respond to contingencies anywhere in the world. For the Marine Corps, these capabilities will add to JVX's ability to conduct a two-sortie assault from amphibious ships located 50-110 nautical miles from objectives or, alternatively, capability to penetrate up to 200 nautical miles behind enemy lines during subsequent-operations-ashore. For special warfare, as with the Air Force's long range Special Operations Force JVX transport mission, JVX will enable naval or Army reconaissance or special forces teams to penetrate up to 700 nautical miles behind enemy lines. JVX will provide the Marines and other Services a quantum leap in strategic mobility to rapidly respond to distant contingencies as well as increased tactical flexibility which comes from the tilt rotor's speed, long range and high transport productivity. In extensive reviews within the Department, JVX was determined to be an affordable program with significant improvements for Marine Corps, as well as Navy, Army and Air Force capabilities. JVX will be the first of a new generation of V/STOL aircraft that will greatly enhance Defense preparedness with enormous potential for commercial applications.

Question: LHX is another large rotary wing program. The Army wants to buy from 6-7,000 light helicopters to replace a wide range of existing utility, attack and scout helicopters. Now, this is another large, expensive rotary wing program -the Army even proposes to go to full scale development in FY 1986. Yet they can't even give us a ballpark estimate as to total program acquisition costs.

Shouldn't the LHX be slowed down? Are you convinced that the Army might have made a mistake by proposing to accelerate the IOC of the LHX by 2 years to FY 1992?

Answer: I am convinced that the Army needs to replace the aging and increasingly expensive-to-maintain fleet of light helicopters - the AH-1s, the UH-1s and the OH-6/58C's. The Army has made a decision to accelerate the development of the LHX instead of making major investments for performance and life-extension improvements and are presently assessing the impact of that decision through a series of preliminary design studies, technology verification efforts and cost estimates/cost tradeoffs. As these efforts produce results, a better view will emerge as to the feasibility of the proposed LHX IOC acceleration.

ADD BACK OF FOUR C-5Bs IN FY 87

QUESTION: Mr. Secretary, in your FY 1985 budget revision you recommend a cut of $317.7 million to delete 2 C-5Bs from the FY 1985 buy and 2 more from the FY 1986 buy. These four C-5Bs would be restored in the FY 1987 program, when 23 C-5Bs would now be produced. Under the C-5B contract, can these 4 C-5Bs be added back in FY 1987 without breaking the firm fixed price contract with Lockheed?

ANSWER: Yes. The C-5B firm fixed price contract with Lockheed does allow procurement of 2 fewer aircraft in both FY 1985 and FY 1986. These aircraft must be added to the FY 1987 buy. This action is within contract provisions and does not require renegotiation.

C-5B BUY

QUESTION: Isn't it more likely that you would consider stretching the C-5B buy into FY 1988 rather than increasing the production capacity for one year? Or would you consider capping C-5B procurement below 50?

ANSWER: Stretching C-5B procurement into FY 88 would require renegotiation of the firm fixed price contract with Lockheed. Total program cost would increase and needed capability would be delayed.

Stretching the buy rather than increasing production capacity is not valid. There is virtually no impact on production capacity caused by slipping aircraft to FY 87. Increasing the FY 87 buy to 23 aircraft results in one less aircraft being delivered in FY 87 (11 versus 12) and FY 88 (20 versus 21). These two aircraft are delivered in FY 89 and the 50th aircraft is still delivered in Feb 89. The only change in production rate is that delivery of two aircraft per month is delayed three months from Jan 88 to Apr 88.

The increased cost in FY 87 associated with slipping aircraft was fully considered and the plan is to remain within the provisions of the current fixed price contract which requires completing the buy of 50 C-5Bs in FY 87.

C-5B Program

Question: Would it be prudent or possible to have these two programs competing for procurement dollars? Isn't it likely that one would have to go?

Answer: It would not be imprudent or impossible to have C-5B and C-17 procurement in the same year. The Department has not chosen to slip any C-5Bs to 1987 since this would abrogate the terms of the fixed price contract.

NON-RECURRING COSTS FOR C-5B PROGRAM

QUESTION: What specifically will be bought with the $108.4 million requested for non-recurring costs for the C-5B program? Identify which equipment is needed to support production and whether or not any such equipment is needed to increase production rates above an annual rate of 14.

ANSWER: The $108.4 million requested for C-5B non-recurring costs in FY 85 funds tool order release ($42 million), tool-up requirements ($42 million) and completion of residual start-up tasks

($25.4 million). All of the non-recurring funds are necessary to support the production effort.

Non-recurring funding is a negotiated cost in the firm fixed price contract. It supports start-up requirements and is predicated on the production schedule contained in the contract. The C-5B program will initially deliver 4 aircraft between Dec 85 and May 86 In July 86, a rate of 1 aircraft per month is achieved until reaching 2 per month in Jan 88 through the final delivery in Feb 89. Over the 39 month delivery schedule, the production rate starts at 8 per year, increases to 12 per year after 8 months and is 24 per year over the last 14 months. Establishing a 14 aircraft per year production rate would mean a lower procurement quantity, not a lower non-recurring cost.

FY 1984 NON-RECURRING COSTS

QUESTION: Identify how the $282.5 million provided in 1984 for non-recurring cost was spent to include tooling for production line support. Identify what production levels these expenditures supported.

ANSWER: The FY 84 C-5B non-recurring costs fund critical design review tasks ($41 million), full release engineering tasks ($42 million), tool order release ($100 million) and tool-up requirements ($100 million).

The FY 84 funding along with FY 83 and FY 85 non-recurring money (approximately $655 million total) supports the production levels as specified in the firm fixed price contract. Over the 39 month delivery schedule (Dec 85 to Feb 89), the production rate starts at 8 per year, increases to 12 per year after 8 months and is 24 per year over the last 14 months of the program.

DELETION OF $50 MILLION FOR "ECOs"

QUESTION: What would be the impact of deleting $50 million for "ECOs" from your request?

ANSWER: During the revision of the FY 85 President's Budget, C-5B ECO requirements for FY 85 were reevaluated. As a result of this effort, the ECO line was reduced by approximately $95 million to $30.4 million. This equates to $3.8 million per aircraft versus $12.5 million per aircraft in the original budget. Any further reduction below this amount would significantly increase risk and the program office's ability to maintain C-5A and C-5B commonality.

FUNDING FOR TRAINING IN 1985

QUESTION: Why is $102 million needed for training in 1985 when none was needed in 1984?

ANSWER: Budgetary constraints in FY 84 and adequate FY 83 training funds to meet initial requirements was why there was no money requested in FY 84. The FY 84 firm contractual requirement to Lockheed for four aircraft was approximately $1297 million. This left only $4 million for all support items (tech data, support equipment and training).

The FY 85 request for $102 million is needed to continue procurement of maintenance and aircrew training equipment to support initial aircraft deliveries in Dec 85.

Transfers

Question: Part of the "savings" submitted by the Department are actually refinancing proposals utilizing prior year appropriations. When will you be able to identify which specific prior year programs can be utilized in 1985 and future years?

Answer: Of the $1,000.0 million offered as reductions to prior year programs, $213.8 million was identified with specific prior year programs. The $213.8 million consisted of $45.3 million from the FY 1983 and FY 1984 M-1 Abrams Tank programs, $41.7 million from the FY 1984 Sergeant York Air Defense Weapon (DIVAD), and $144.8 million from the FY 1983 C-19 Cargo Aircraft program. The remaining savings of $786.2 million are those funds the Department has projected as lapsing for obligational purposes when the appropriations expire. The levels of funding projected to lapse by appropriations were developed by an analysis of the performance of these appropriations in prior years, and as such did not apply to specific line items or programs. Since it is our intention not to withdraw these funds until the appropriation is about to lapse we cannot provide a specific list of donor programs at this time.

Question: Utilizing some of these prior year appropriations will involve extending their availability. This is considered a reappropriaton and is scored recently as new budget authority. Are you aware that there will be no actual savings involved when these funds are scored as new budget authority?

Answer: No I am not aware of that. Since the Department is specifically giving up funding appropriated in prior years for specific appropriations and has proposed the utilization of those funds in lieu of FY 1985 New Obligational Authority, the Department will now not spend those funds for the purposes orginally appropriated. I would consider this action generates actual savings.

MANPOWER

QUESTION: Given the requirement to reduce the defense budget, why are you still pursuing a 5.5% military pay raise when you asked for no raise at all last year?

ANSWER: Military personnel received a pay increase of 4 percent in both FY83 and FY84 while private sector pay growth was 8.1 percent and 5.6 percent, respectively, during the same period. As a result, military pay has fallen 5.5 percent behind private sector pay. For FY85, the relevant growth in private sector pay is 5.1 percent. Failure to at least match this 5.1 percent pay growth will constitute a third consecutive military pay raise cap and will cause the current 5.5 percent pay gap to grow even further. We believe that would be a mistake. The severe recruiting and retention problems of the late 1970s are a graphic reminder of what happens when military pay lags far behind private sector pay. We believe, therefore, that it is imperative that military personnel receive a 5.5 percent raise. It would match the 5.1 percent private sector pay growth plus provide a small incremental catch-up of the pay sacrifice military members have made over the past two years.

It is true that the President reluctantly included military personnel in his original request for a government pay freeze in FY84. However, it was made clear to military personnel that we would attempt to recognize in FY85 the pay sacrifice we were asking of them in FY84. We are following through on that commitment. Had military pay been frozen in FY84, we would have sought an increase greater than 5.5 percent in FY85. However, since an increase of 4 percent was provided, we believe the 5.5 percent increase is fair and equitable.

QUESTION: Dr. Korb testified to this Committee that current military pay scales are fair. He added that private sector wages will likely increase by less than 5 percent in 1985.

Why shouldn't Congress then consider a lower pay raise?

ANSWER: At the time of Dr. Korb's testimony, the projected increase in civilian pay was estimated to be 4.7 percent. We now know that the actual increase is 5.1 percent. We believe that the military pay raise should match this civilian wage growth plus provide a partial catch-up for the caps on military pay raises in the past two years. As a result of those caps, military pay is already 5.5 percent behind private sector pay. The difference between the civilian wage growth of 5.1 percent and the 5.5 percent military raise we are seeking will close that gap somewhat.

GI BILL

QUESTION: The House authorization bill added a new educational assistance benefit that would pay up to $1,300 a month to former military personnel.

Considering the cost, current recruiting and retention improvements and vastly improved compensation, does the Department consider this kind of a program to be wise or necessary?

ANSWER: An expensive new program at this time is both unnecessary and unwise. In light of our other defense needs and our limited resources, this is not the time to enact new programs that aren't urgently needed.

Recruiting and retention remain good. A new educational benefit program can not be justified by force manning needs at this time. Moreover, our current educational assistance program, consisting of the Veteran's Educational Assistance Program (VEAP), which is offered to all active duty recruits, and supplementary educational benefits offered to qualified applicants who agree to enlist in selected hard-to-fill skills in the active and selected reserve forces, appears to be working quite well. This program targets educational incentives to the areas where there are manning problems. Moreover, it meets our current needs at about one-third to one-fourth the cost of most of the new programs that have been proposed.

Recruiting may become more difficult in the future as the economy continues to improve and the recruit-age population declines. However, instead of enacting an expensive, across-the-board educational assistance program now in anticipation of future problems, we would much prefer to retain the flexibility to examine all alternatives, and choose the mix of recruiting incentives that alleviates problems as they arise, and does so as economically as possible from the taxpayers' viewpoint. This may mean that a new program may become desirable, but other options should also be examined. For example, a modest expansion of the current educational assistance program, coupled with additional recruiting and retention resources targeted to the problems areas, might prove to be the best way to meet future problems. It is for this reason that we support S.1873, which requires the President to report to Congress on the need for a new educational assistance program by July 1, 1987, after having examined manpower problems and alternative solutions to them, and provides for the expeditious consideration of legislation, if necessary.

VHA

QUESTION: Both the House and Senate Armed Services Committees are in the process of recommending legislation that would place military personnel in Alaska and Hawaii under the variable housing allowance program instead of the rent-plus benefits now available. It has been reported that this initiative was inspired by certain people in the Department because of restraints by the VHA program. Meanwhile, the Committee has received statements from the Department and the individual services opposing this change as unfair and unsupported.

What is the Department's position on this issue?

ANSWER: It is not true that this initiative was inspired by someone in the Defense Department. The Department is opposed to the arbitrary conversion to VHA in Alaska and Hawaii as proposed by the Armed Services Committees. We would prefer to be given an opportunity to evaluate the impact of such a proposal so that the decision on whether or not to implement can be made on an informed basis.

QUESTION: If the Department opposes this proposed change, why did it not appeal the House Armed Services Committee recommendation?

ANSWER: In statements for the record made prior to the SASC action, DoD expressed its opposition to implementation of VHA in Alaska and Hawaii. Further, DoD opposition was made clear to the SASC in informal discussions. In informing the SASC, therefore, of the high priority appeal items from the HASC action on the Authorization Act, we did not believe it necessary to include the implementation of VHA in Alaska and Hawaii. We are confident that the SASC acted with full knowledge of the Department's position on this issue.

QUESTION: What is the Department doing specifically to discourage this VHA legislation?

ANSWER: During consideration of the FY85 DoD Authorization Act by the House and Senate Armed Services Committees, DoD and the Services made known its opposition to this action. Despite this, the conversion to VHA in Alaska and Hawaii is included in both the House and Senate versions of the Authorization Act. While at this point, there are few options left available to the Department we are continuing our efforts to discourage the implementation of VHA in Alaska and Hawaii, so that we can evaluate the impact of such a proposal prior to taking any action.

NATO COMMITMENT

QUESTION: Mr. Secretary, with the defense squeeze it is essential to reexamine our expanding NATO commitment. The most recent report on NATO expenditures shows our European allies have once again failed to meet their 3 percent goal for defense.

Why then do we continue to expand our own involvement?
ANSWER: We make every effort to encourage our allies to do more as indeed we must all do more to meet the growing Soviet/Warsaw Pact threat. However, in the final analysis our involvement is determined by what is in the best interest of the security of the United States.

NATO COSTS

QUESTION: Mr. Secretary, two years ago the Department attempted to back away from its own $133 billion estimate of the cost of our total NATO commitment. At that time departmental witnesses testified they would furnish the Committee with new estimates of our total commitment. None has ever appeared.

What is the cost of our entire NATO commitment in current fiscal year and projected for fiscal year 1985?
ANSWER: The Department of Defense is currently in the final stages of preparing a report required by the Department of Defense Authorization Act, 1984. When submitted it will provide a detailed answer to this question. While we have sought in the forthcoming report to be responsive to the expressed Congressional requirements, we must emphasize the limitations of the data as a measure of our costs. The figures will obscure the fact that the bulk of our forces have world-wide missions which make it impossible to separate out specific costs properly attributable to our NATO membership. Therefore, I urge the greatest caution in any attempt to use the data in the report as an indicator of US costs for NATO.

NATO Airbase Defense

QUESTION: Mr. Secretary, the Department has never budgeted for NATO airbase defense, but Congress has appropriated $250 million for this program over the past two years. To date, we understand, none of this funding has been obligated.

Again this year there is no budget request for this co-operative airbase defense, but the House Armed Services Committee has recommended another $350 million for it.

If so, why has none of it ever been budgeted?
ANSWER: The Department of Defense does support this effort. However, the obligation of funds for NATO Cooperative Air Defense programs requires that we have a detailed agreement with each of the Host NAtions. These agreements must be endorsed by each country's Department of Defense prior to submission to Congress. We are currently in negotiation with Germany and have had preliminary discussions with Turkey for air defense programs in these countries. These cooperative agreements will improve NATO air defense and. in particular, air defense of US air bases in both countries.

The basis for the agreement is that each country provides equipment and manning for this critical mission area. In the case of the agreement with the Germans, the US provides Patriot high and medium altitude air defense systems to Germany and in return Germany mans two battalions of US Patriots and provides and mans Roland point air defense weapons for the defense of three US air bases in Germany.

It should be recognized that entry into a cooperative arrangement takes considerable time and negotiation. Negotiations to reach a detailed US/United Kingdom Memorandum of Understanding (MOU) on Rapier took two years after the initial agreement in principle. The lag time reflects a realistic period between the broad agreement to do something, and the more detailed agreement on such necessary items as delivery schedules.

NATO Airbase Defense

QUESTION: Mr. Secretary, the Department has never budgeted for NATO airbase defense, but Congress has appropriated $250 million for this program over the past two years. To date, we understand, none of this funding has been obligated.

Again this year there is no budget request for this cooperative airbase defense, but the House Armed Services Committee has recommended another $350 million for it.

Does the Department support this funding?

ANSWER: Yes. Strengthening NATO air defense including airbase defense is among the top priorities for NATO conventional forces. This priority is supported by every member of the Alliance and the NATO Commanders. Funding for NATO airbase defense is a welcomed Congressional initiative. The Department requests the flexibility to apply additonal appropriations where the US would get the maximum benefit from such funding.

QUESTION: Congress required the submission of any airbase agreement with a foreign government before any funds could be obligated. When will such an agreement be ready for submission?

ANSWER: Negotiations for the US-FRG Cooperative Air Defense Agreement have taken longer than anticipated causing a delay in the formal submission of the agreement to Congress. This delay is considered temporary and it is expected that the airbase agreement will be submitted to Congress before the end of the summer, 1984.

The Department is fully cognizant of Congressional interests in strengthening airbase defense in Europe and wishes to work closely with Congress on this important objective. In addition to informal consultations with Congress, the Department will submit all necessary documentation as the agreement evolves. In all cases, the Department makes it clear to our foreign partners that cooperative airbase defense agreements, as with all government-to-government agreementa, must comply with US legislation and are subject to Congressional review.

QUESTION: Why should Congress appropriate still more funding for NATO airbase defense when the Department cannot finalize an agreement with the Federal Republic of Germany utilizing funding already available?

ANSWER: Strengthening NATO air defense including airbase defense is among the top priorities for NATO conventional forces. This priority is supported by every member of the Alliance, the NATO Commanders and, indeed, Congress itself.

The Department appreciates the support of Congress for cooperative NATO airbase defense arrangements and we expect to finalize in the near future the details of an Implementing Agreement with the FRG. Such arrangements require considerable time to negotiate. In fact, negotiations with the Germans are proceeding rather quickly compared to the US-UK Memorandum of Understanding on Rapier which required two years after the initial agreement in principle was made.

Additional funding for NATO airbase defense would be a welcome Congressional initiative. The Department would request the flexibility to apply additional appropriations where the US would get the maximum benefit from such funding.

QUESTION: Last year the appropriation conferees required that all future NATO airbase defense funding requirements be budgeted. There is no 1985 budget request. Are any funds even programmed in 1986?

ANSWER: The Army cannot program money to support the US-FRG cooperative air defense agreement until it is finalized, however it is prepared to support the agreement as soon as it is signed. The Air Force does request funding for Rapier which is used for defense of bases in the United Kingdom. The US Army also provides defense for airbases in Germany with Chaparral, Vulcan, and IHAWK units. Funding for these units is contained in the appropriate missile procurement lines in the Army's budget. Other funding related to NATO airbase defense might include items such as Research, Development, Training and Evualation, and Operations and Maintenance. These costs would also be included in other parts of the Defense Budget.

The Department has not programmed funds for new cooperative airbase defense programs but believes they are definitely worth exploring.

ASAT TESTING

Question: The House voted yesterday to continue the ban on testing the Air Force ASAT against targets in space. In your judgement, how would such a prohibition affect our anti-satellite weapons program and our bargaining position on a treaty to control such weapons?

Answer: Without testing against objects in space, there is no assurance the miniature vehicle ASAT can effect the necessary maneuvers to intercept a satellite. The testing of this crucial phase of the mission cannot be validated by any currently envisioned ground test. From history of the ABM negotiations the Soviets have never negotiated away their own operational capability for an unproven and untested prototype. Thus our bargaining position on a treaty would be considerably weaker without testing the ASAT against targets in space.

Tactical Fighter Procurement

Question: What does the Department intend to do to make the planning and budgetary process reflect a more realistic spending level?

Answer: The Department's budget is based on well validated military requirements and prices using the most realistic prices. It is constrained by two factors, the level of funding which the administration desires to devote to Defense and the funding levels provided by the Congress. We intend to continue with this method of formulating our budget.

Question: Given that the Services must choose between the goals of modernization, decreasing age of the force structure and increasing the size of the force, which of these goals is of the highest priority?

Answer: Modernization decreases the average age of the force structure so these two goals do not compete for funds. Between modernization and force structure expansion we give higher priority to modernization. This does not mean, however, that we would fully modernize existing forces before doing any force expansion. It means that we fund a higher percentage of our modernization requirements than of our force structure objectives.

Question: How would you and the operational commanders (CINCs) change the balance between major equipment and support equipment being funded by Congress?

Answer: The program we presented to Congress represented the Department's view of the best balance between major items and support equipment considering all the competing requirements for funds. The CINCs were consulted during the development of the overall program.

EQUIPMENT CONSTRAINTS

QUESTION: If the entire Defense establishment -- Active and Reserve -- had to go to war with equipment funded through FY 1984, what would be your most serious equipment constraints?

ANSWER: There are numerous equipment constraints that would inhibit our ability to go to war, and there is no unanimity on which are the most serious. Certainly airlift shortfalls and the complementary shortages in POMCUS sets would rank high on anyone's list. Shortages and over-age of support equipment of many types -- particularly trucks, medical equipment, CB protection, and engineer equipment -- would present serious problems, especially for the Army.

Guard and Reserve Equipment

QUESTION: Your report on Reserve Component equipment shortages sets the amount of shortages at some $24 billion today. Dr. Philbin testified that only a portion of that was needed to adequately equip the Reserves for their peacetime training. What is the approximate value of the equipment needed for training purposes and could you develop a plan to see that those high priority needs are filled first as Congress provides extra unbudgeted funds for the Reserves?

ANSWER: Since the numbers of items required for training is largely judgmental and varies from unit to unit and from item to item, no value of a training equipment shortfall is currently estimable. Further, except for the newest production lines, training equipment allocation is more a function of distribution than procurement. Furthermore, effective training is clearly dependent upon access to proper equipment regardless of procurement and distribution actions.

To date, the primary effort of the Office of the Assistant Secretary of Defense for Reserve Affairs in assessing Guard and Reserve equipment has been to determine the magnitude of the equipment shortages, i.e., where a piece of equipment for meeting a wartime requirement simply does not exist. Generally, sufficient items of equipment are available for training in units but it is not always current generation equipment. Therein lies the focus of the expanded efforts of the OASD(RA): to explore facets of the equipment situation other than pure shortages. These include substitutability, compatibility, deployability, and obsolescence.

For example, a given unit may have radios available for training but that training is degraded if the radios are incompatible, i.e., cannot "talk", with radios of Active or other Reserve Component units that will be deployed alongside the given unit on the battlefield. Such incompatibility is the subject of a study effort recently contracted by the OASD(RA), and it is this kind of effort that is required before any definition can be given to training equipment deficiencies.

Pending such analyses, the OASD(RA) intends to advocate training equipment enhancements in two ways: first by supporting appropriate policy, program, or budget actions necessary to alleviate any training equipment deficiencies brought to the attention of the OASD(RA), and, second; by enforcing insofar as possible, the one prescribed exception to Department policy of the "first to fight will be the first equipped" -- all units must have sufficient equipment available for training. Adherence to this latter course offers the best plan for applying unbudgeted funds provided by the Congress. Additional opportunities for the expenditure of such funds are in the area of simulators, models, and training aids which may be used in lieu of the actual equipment.

QUESTION: The SDAF currently has a $900 million capitalization and had a total of $475 million obligational authority through 1984. Are you satisfied with those levels?

ANSWER: The level of capitalization is satisfactory through FY 1985; however, it is probable that for FY 1986 we will request an increase in the ceiling of $300 million. This increase will be needed if the SDAF is going to be able to meet the projected foreign demand for critical U.S. military items which are in short supply. Since the SDAF did not receive collections from the sale of defense articles not intended to be replaced in stock in FY 1982 and FY 1984 it is estimated that the fund will fall $40 to $80 million short of the $900 million authorized capitalization.

Obligation authority levels for the SDAF have not been entirely satisfactory. At the present level of support, the SDAF is operating with a total obligation authority that is a little over half of the $900 million cumulative capitalization authorized by the Congress through FY 1984. This level of obligation authority has not allowed the Administration to build the SDAF into as an effective instrument for security assistance management as rapidly as planned. We project that during the next several years the demand for diversions from U.S. military production for the Services and withdrawals from Service inventories, of critical military equipment (tanks, missiles, ammunition, howitzers, radios, helicopters, etc.) will remain at a high level and could affect U.S. combat readiness. For example, a battalion of 54 first-line tanks costs over $110 million without any support or ammunition and has a lead time of over two years. Since October 1979 we have had to withdraw/divert the equivalent of nearly eleven tank battalions from the Army to meet the urgent critical needs of allied and friendly governments, (most of those have been paid back at this time). To be timely and effective, the adminstration should be authorized to obligate all amounts collected into the SDAF up to the capitalization ceiling approved by Congress.

QUESTION: What is your recommendation on using the SDAF as a source of funds for the Department's programs?

ANSWER: We do not support the proposal that SDAF funds should be used for Service programs. Transfer of SDAF funds to Service programs runs counter to intent of the SDAF legislation. Service programs should be supported by firm budget decisions rather than FMS sales which cannot be fully predicted. Funds credited to the SDAF should be used to finance the acquisition of defense articles and services, in anticipation of legitimate foreign demand, to reduce procurement lead times and minimize potential drawdowns of U.S. military equipment.

QUESTION: If the period of availability of SDAF funding were three years as the GAO may recommend, would that increase or decrease the capital requirements for the fund?

ANSWER: Increasing the SDAF obligation authority from one year to three years should have no significant effect on the capital requirements for the fund. The one year obligation authority requirement has complicated SDAF integration into the normal Defense procurement and planning cycle. A three year obligation authority would allow better synchronization of SDAF procurement planning with the budget and acquisition processes of the Military Departments. This will insure that to the extent possible, SDAF procurements can be executed to the maximum extent possible as part of the normal DoD acquisition cycle rather than being compressed into a portion of a single fiscal year following Congressional appropriation action which may take place well into the fiscal year.

OPERATIONAL BACK-UP OF ELVs

QUESTION: Mr Secretary, in the past expendable launch vehicles have been justified as "back-up to guaranteed launch of critical USAF operational payloads in the event that the Space Shuttle orbiter fleet is grounded." Why then is the Department proposing to buy and schedule for missions 2 ELVs each year? That doesn't provide any operational back-up. It merely lessens the use rate of the Shuttle.

ANSWER: The objective of the Expendable Launch Vehicle (ELV) program is to fulfill the DOD requirement for an assured access to space. The ELV's will provide a continuing and operationally responsive complementary launch system to the Shuttle. The DOD is proposing two launches per year from Cape Canaveral AFS on the east coast because this is the minimum rate to economically maintain the industrial base, launch processing, and spares support functions required to sustain a launch system. Further, while the ELV's will provide a complementary system to the Shuttle, they will also provide an operational back-up to the Shuttle in the event the Shuttle fleet is grounded for technical or operational reasons. To implement this strategy, the three payloads designated to fly on these ELV's will be dual compatible with both the ELV and the STS. Therefore, the individual payload launches will be distributed between the STS and the ELV's. If either the STS or the ELV is grounded, the alternate launch system can be used to assure access to space for these time critical national security payloads.

RESTRUCTURE OF THE ELV PROGRAM

QUESTION: Can the program be restructured to keep a few, say two, ELVs on hand at all times as back-up?

ANSWER: While it is DOD's intent to launch all ten ELV's during the 1988-1992 timeframe, the DOD could retain a few of these ELV's as backup at a significant increase in cost. It is important to note that each backup costs effectively twice as much as a primary mission, since funds must be provided to both purchase the ELV and pay the STS flight charge. In addition funding must be provided for ELV storage and sustaining support. Therefore, there appears to be no clear advantage to keeping two of these ten ELV's in a permanent back-up role.

NAVY AIRCRAFT MODIFICATIONS AND AIRCRAFT COMMON GROUND EQUIPMENT

QUESTION: Provide the details of how the $200 million reduction in aircraft modifications and the $100 million reduction in aircraft common ground equipment will be distributed by budget line.

ANSWER: Adjustments to the aircraft modification and common ground equipment lines such as anticipated contract savings are considered to be attainable without seriously degrading readiness only if the Navy is allowed the flexibility of identifying the specific items to be reduced during the program execution process. The Navy recommends that these adjustments be applied at the appropriation budget activity level and through execution of the FY 1985 program; the Navy will ensure that the adjustments have minimal programatic effect. The Navy is prepared to develop a simple report to the oversight committees identifying where the reductions are ultimately taken.

QUESTION: Please provide a brief outline of the FY 1985 activities for each of the following Defense Nuclear Agency programs:

1. Underground Nuclear Tests
2. Nuclear Effects on Electronics
3. Effects Simulation using Simulators
4. Effects Simulation using High Explosives
5. Effects Simulation using Natural Disturbances

ANSWER: 1. The underground nuclear test (UGT) program is the most significant and indispensable aspect of the entire DNA test program. The mission of this program is to assess the survivability of our own military systems in a nuclear environment, predict lethality levels for destruction of enemy assets and develop the technology to enhance the survivability and security of our forces. In FY 85, we plan to conduct three tests, i.e., MISTY RAIN, MILL YARD, and DIAMOND BEECH, (MILL YARD and DIAMOND BEECH will be conducted concurrently). The type and purpose of each test are as follows:

MISTY RAIN - Large scale horizontal line-of-sight nuclear effects test in support of MK 21 hardness validation and satellite vulnerability phenomenology.

MILL YARD - Cavity UGT to be conducted to obtain data on cratering phenomenology. Will also address issues crucial to the Small Missile basing program. Follow-on to MINI JADE (FY 83).

DIAMOND BEECH - Low-yield test bed development test. Third and final test for the development of a smaller, more flexible, and potentially less costly test bed for radiation effects testing.

2. The purpose of the nuclear effects on electronics programs is to quantify nuclear vulnerability of electronics and provide the technology and other support required to harden and maintain the hardness of electronic systems against nuclear weapons effects. Electronic assemblies are susceptible to interrupted operations, degraded performance or catastrophic failure when subjected to nuclear weapon radiation. Rapid evolution of semiconductor technology has generated new types of devices, new processing techniques and increased microminiaturization, all of which introduce new hardening problems.

Electromagnetic Pulse (EMP), System Generated EMP (SGEMP), and Source Region EMP (SREMP) effects result when large currents are induced on metallic elements of a system in the aftermath of a nuclear event. These currents can upset and/or permanently damage critical circuit elements.

Our Fiscal Year 1985 plans for the four principal tasks within the Nuclear Effects on Electronics project may be briefly summarized as follows:

Radiation Hardening of Electronics. Nuclear weapon radiation hardness assurance procedures will be developed for incorporation into the Military Standard Procurement System. New processing techniques will be developed to increase the nuclear weapon radiation hardness of higher density memory microprocessor devices.

High Altitude EMP (HAEMP). Plans will be finalized for full-scale HAEMP tests of the PEACEKEEPER missile at the DNA Advanced Research Electromagnetic Simulator (ARES) facility. New EMP hardening technologies, including combinations of shielding, terminal protection and fiber optics cables, will be investigated.

System Generated EMP (SGEMP). Continuing experiments to determine SGEMP effects on missiles, reentry systems and satellites will be conducted using aboveground simulators.

Source Region Electromagnetic Pulse (SREMP). A major validation test of the deep-based PEACEKEEPER electrical surge arrestor and associated circuitry to SREMP effects will be conducted.

3. The Simulator program will obtain nuclear weapons effects data by testing strategic and tactical weapons systems and their major components in laboratory simulation facilities. These effects include high-altitude Electromagnetic Pulse (EMP), System Generated EMP (SGEMP), Source Region EMP (SREMP), Transient Radiation Effects on Electronics (TREE), Thermomechanical Shock (TMS), air blast, thermal radiation and fire.

An aircraft EMP vulnerability assessment methodology will be completed and documented for all DoD users. Aircraft, helicopters and mobile communication vans will be tested at the Horizontal and Vertical Dipole (HPD and VPD) EMP facilities at Kirtland Air Force Base.

Selected Hawaiian telecommunications facilities will be tested for EMP effects using a transportable continuous wave radiation simulator.

The Tri-Service Thermal Simulator at Wright-Patterson Air Force Base will be used for approximately 2500 tests of small samples in a simulated nuclear thermal environment. The thermal environment may be combined with either aerodynamic loads or static tensile and bending loads. This facility will be modified in FY 1984 with a new high intensity flash lamp thermal source.

Testing of large area structures or systems will continue at the Thermal Radiation Simulation (TRS) Facility at Kirtland Air Force Base. In addition, 7 TRS units will be fielded on the FY 1985 MINOR SCALE high explosive event. This test will allow full scale systems to be subjected to combined thermal and blast effects.

Conceputal development will continue on the Large Blast/Thermal Simulator. Such a simulator, when completed, will allow testing of tactical systems in a realistic nuclear blast and blast/thermal environmemt under laboratory conditions.

The experimental program validating urban mass fire dynamics and spread models will near completion. The data will be integrated into the Government-wide "Nuclear Winter" research program.

Construction of a barge mounted high-altitude EMP simulator, EMPRESS II, for testing of Navy surface ships, will continue through FY 1985. New approaches to hardening surface ships to high altitude EMP will be developed in conjunction with the Navy.

4. The Effects Testing Using High Explosive (HE) program is designed to provide nuclear weapons effects data through the use of large-scale high explosive field tests. Information which either cannot be obtained from underground nuclear tests or which would be more costly to obtain in that manner is provided. An 8 kiloton high explosive nuclear simulation nicknamed MINOR SCALE is scheduled for September 1985. A major set of tests of Hard-

ened Mobile Launcher concepts for the Small ICBM will be included. Participants include all Services, FEMA and Allied Nations. (Other nations pay a full share of the costs.) The test will be conducted at White Sands Missile Range.

5. The purpose of the project on Effects Testing Using Natural Disturbances is to use natural and artificial phenomena such as ionspheric disturbances, as well as laboratory experiments to simulate important aspects of atmospheric conditions following nuclear detonations.

Several important nuclear effects on radio, laser, and IR signals occur either naturally in disturbed atmospheres above 50 miles or can be induced by various means. Experiments using rockets, the space shuttle, ground instruments, and the DNA Hilat Satellite are executed to define and understand the disturbed regions. The results are passed on to other programs which evaluate, improve, and test DoD systems in the simulated nuclear environments. The IR portion of this program has been transferred to the Strategic Defense Initiatives (SDI) program in FY 1985. The IR program under SDI will continue to provide critically important data to remaining program objectives that are not part of SDI.

Experiments at very low frequency (VLF), extremely low frequency (ELF), and high frequency (HF) are being executed to assess the utility of proposed system improvements in simulated nuclear conditions.

QUESTION: Please provide a listing of all underground nuclear tests to be conducted during FY 1985.

ANSWER: The underground nuclear tests planned for FY 1985 are:

MISTY RAIN - A large scale horizontal line-of-sight effects test in support of MK 21 hardness validation and satellite vulnerability phenomenology. Scheduled for February 1985.

MILL YARD - A cavity test design to obtain data on cratering phenomenology. Scheduled for June 1985.

DIAMOND BEECH - Low yield test bed development test. Third and final test in the development of a smaller, more flexible test bed for radiation effects testing. Scheduled for June 1985.

QUESTION: Is this the same schedule as in last year's projection for FY 1985?

ANSWER: No. Due to problems with developing precise models for the MK 21 reentry vehicle, the MISTY RAIN event was delayed from FY 84 to FY 85. This necessitated a delay of the MIGHTY OAK event from FY 85 to FY 86. However, the timing of the delays was such that we were able to schedule the MILL YARD event to address critical uncertainties involving cratering phenomenology. MILL YARD will be conducted concurrently with DIAMOND BEECH thus minimizing total test costs.

QUESTION: What are the primary DNA activities related to the PEACEKEEPER and Small ICBM that will be conducted in FY 1985?

ANSWER: Fiscal Year 1985 will be the second year of intensive work under the Joint Program Plan between DNA and the Air Force for hardening of the Small ICBM and its basing. The Program Plan was prepared pursuant to the recommendations of the Scowcroft Commission that DNA should continue to play a leading role in this area because it was instrumental in formulation of both the Hardened Mobile Launcher and Superhard Silo concepts. Our Hardened Mobile Launcher (HML) efforts will include another high explosive event in the summer of 1985 named MINOR SCALE, which will simulate an 8 KT surface burst. This event will provide a test bed for further HML testing. We will pursue a vigorous 17 inch and 6 foot shock tube experimental program to investigate HML nuclear environment phenomenology, simulation, and instrumentation development. These shock tube experiments, in conjunction with concurrent calculations, computer code development, and modeling procedures, will lead to the design and construction of the best feasible large-scale simulation capability for the Air Force validation of HML concepts in 1986. Superhard silo work during the next year will include the development of a surface high explosive test simulation to replicate the nuclear cratering process. This will be supported by a second underground nuclear test in a cavity (MILL YARD). In addition, our plans include extensive investigation and reevaluation of the nuclear craters resulting from the 1950-1960 tests at the Pacific Proving Ground. Finally, DNA is investigating the upper limits to silo hardening to ensure that the joint DNA/Air Force program provides cost effective solutions for a range of hardness so the optimum hardness can be rationally selected. This exploratory program involves several alternative design concepts and scale model testing.

The MISTY RAIN underground event is primarily in support of the PEACEKEEPER system. MISTY RAIN will be the second UGT in a series of three tests to validate the nuclear hardness of the Mark 21 reentry vehicle for PEACEKEEPER. Approximately 70% of the available test bed is devoted to this purpose, with the remainder of the test space being devoted to space systems and advanced concepts.

DNA is assisting the Air Force Ballistic Missile Office in validating the nuclear hardness of PEACEKEEPER missiles placed in MINUTEMAN silos. This involves determining the susceptibility of power lines and other silo electrical connections to source region EMP effects and planning for an EMP test of the full-scale engineering development PEACEKEEPER missile in FY 1986 at the DNA ARES facility. All of these activities are being funded by the Air Force, but will use DNA's in-house resources and are only possible because of DNA's past work on the technology base.

DNA will also assist the BMO in developing radiation hardened electronics subsystems for the small ICBM, with primary emphasis placed on the development of radiation hardened microelectronics needed to meet the inertial guidance system requirements.

QUESTION: Would a restructuring of the MX procurement necessitate any change in the DNA testing program for the missile?

ANSWER: No, not unless there were a major slip in Initial Operational Capability of the entire system. Hardware to be fielded on the FY 85 MISTY RAIN underground test is already under fabrication and does not come out of production funds. DNA will conduct a simulated high altitude EMP test on the full-scale engineering development missile using the DNA ARES facility at Kirtland Air Force Base in FY 86. Restructing of the MX procurement should not necessitate any change in the testing program.

QUESTION: Nuclear freeze proponents support a comprehensive ban on all nuclear weapons testing. This would extend to underground nuclear tests, and would have a major impact on DNA's nuclear weapons research capabilities. Please outline the impact that a comprehensive test ban would have on the ability of DNA and our nuclear weapons laboratories to maintain an adequate technology base in nuclear weapons research and a competent cadre of nuclear weapons scientists.

ANSWER: A comprehensive test ban would seriously affect our ability to validate the hardness of military systems to a number of nuclear weapon effects such as soft X-ray, systems generated EMP, combined thermal/structural response and thermomechanical effects. Aboveground nuclear effects simulators are available to provide some of the data required, but, in many cases, full system tests can be conducted only in underground nuclear tests. A comprehensive test ban treaty would prevent the resolution of critical uncertainties in the surviability of strategic systems. Several Administrations in a row have taken the position that world stability is best assured if both sides have confidence in the survivability of their strategic systems, and we see no need for any change in that viewpoint.

A comprehensive test ban which prohibited all underground nuclear testing would have a severe impact on DNA's ability to evaluate nuclear weapons effects. There are many new materials and new designs being developed for weapons systems, and computational techniques are insufficient for reliably determining how they will respond in a nuclear environment. Radiation simulators are good for small scale and screening type tests but they do not provide sufficient fidelity or fluence for final testing of many systems. The cadre of nuclear weapons scientists who support effects testing underground would be severely reduced and eventually completely lost, thereby eliminating our ability to resume any type of nuclear testing. The current cadre, while expert in conducting underground tests, also maintains for the US a certain capability to conduct atmospheric testing should the Soviets abrogate the Limited Test Ban Treaty.

QUESTION: Does the FY 1985 DNA budget include a manpower increase over FY 1984 levels?

ANSWER: Yes, DNA's civilian manpower level for FY 1985 does increase by 11 spaces over FY 1984 levels.

QUESTION: Why is the increase required?

ANSWER: Increases for FY 1985 are required in the following areas for the stated reasons:

a. Radiobiology Research. (Required Increase: 4 civilian positions) Additional personnel are required to support basic research efforts. New research initiatives will be pursued to investigate the combined effects of chemical agents and radiation on combat performance. Major new research initiatives will be conducted on combined injuries (radiation, trauma, and burns). Expanded investigation in radiological physics is required. The Services have identified a potentially severe problem concerning low-level exposures to high-energy neutrons. There is a severe lack of data on the biologic effect of neutrons with these energy levels and research into basic mechanisms of radiation damage to biological systems is needed.

b. Science and Technology. (Required Increase: 5 civilian positions) Increased emphasis on program efforts already underway (e.g., underground test program) and the directed addition of numerous new programs require additional technical management expertise. The intensified DoD emphasis on nuclear weapons effects programs has created a critical requirement for an increase in DNA's RDT&E staff. New programs have been initiated to the hardening of space based radar and laser systems, Ballistic Missile Defense, and field verification programs for tactical communications. DNA/Service cooperative programs have been initiated to develop standards and specifications for nuclear weapons effects and directed energy systems damage. Critical communications hardening to the effects caused by the electromagnetic pulse that results from high altitude nuclear detonations has received intensified national attention. The resultant demands on DNA's programs are great. Increased scope and complexity in areas of command and control, as well as safety, security and survivability studies of theater land-based nuclear systems, require additional personnel. The DNA underground nuclear test program has been expanded, basically doubling the testing rate in the FY 1985-1989 time frame. Additional personnel are needed to support this test program.

c. General Support. (Required Increase: 2 civilian positions) Automatic data processing personnel are urgently required for installing the General Accounting Office (GAO) approved Centralized Accounting and Financial Resource Management System (CAFRMS); automating the tracking of contract actions associated with increasing the numbers of competitive contracts; the implementation of an automated information system, support of classified processing of operation and maintenance functions; and support of Agency organizations which require automation of manual operations and maintenance tasks. Physical security programs for classified publications must be enhanced with the increased usage of computers and the amount of classified materials. Additional manpower is required to satisfy these requirements.

ASAT Arms Control

Question: The President's report to Congress on the ASAT arms control policy concluded the prospects for genuine progress on a verifiable ASAT arms control agreement are limited.

The Vice-President submitted a comprehensive proposal for a ban on chemical weapons to the Conference on Disarmament. What prevents you from doing the same in the area of anti-satellite weapons?

Answer: The Administration is actively studying possible space arms control options with a view toward discussions with the Soviet Union or other nations, provided we can devise an approach that is not inimical to our national security interests. It would not be in our interest, for example, to negotiate a ban on ASAT systems that was not verifiable.

A Chemical Weapons ban is difficult to verify. But we have designed a verification regime that is a strong deterrent to cheating. The difference between the CW ban that we have proposed and the idea of an ASAT ban is essentially twofold:

First, in the case of our CW proposal, we have been able to develop detailed descriptions and lists of activities and substances which should be banned in order to implement effective arms control limitations in this area. On the other hand, however, it is difficult to define what constitutes a space weapon for arms control purposes. In seeking ways to verify an ASAT weapon ban, the Administration has been confronted with critical definitional problems: (1) there are many different types of systems which could be used to destroy satellites; (2) in general, many activities related to space give rise to capabilities inherently useful for ASAT purposes; and (3) restricting the definition of what is an ASAT weapon could make an agreement easier to verify, but ineffective in achieving its purpose of protecting satellites. These definition problems interact with and compound the verification problems.

Secondly, there is a difference in the nature of the threat. A violation of a CW ban could be of great military significance--but would still be of lesser magnitude than a violation of an ASAT ban, which even on a small scale, could pose a disproportionate risk to the United States. This is because the satellites which serve U.S. and Allied security are few in number.

Question: How difficult are the verification and breakout problems:

Answer: The issues of verification and breakout pose a number of problems which have not yet been resolved. These problems are more difficult for a comprehensive ASAT ban. First, due to a basic difference in the openness between the two societies, assessing compliance to arms control agreements is more difficult for the United States. In addition, because of the wide variety of ASAT systems and the fact that ASAT capabilities can be a by-product of systems developed for other missions, this ambiguity creates a problem in identifying what would be prohibited under the agreement A ban on all ASAT systems would require that the Soviet ASAT interceptor system be eliminated. The Soviet interceptor is relatively small and is launched by a type of space booster that the Soviets use for other space launch missions. We do not know how many interceptors or boosters have been manufactured and therefore, it is conceivable that covert supplies could be maintained. This creates the potential for breakout. Breakout potential is the risk that one nation could gain a unilateral advantage by suddenly abrogating an agreement and obtaining a head start in building or deploying anti-satellite weapons. In reference to the Soviet system, this potential may be a problem and is being further studied.

Test bans for more limited classes of ASAT systems can be easier to verify, and these options are being studied to determine if they are in our national interest.

Question: The unclassified version of the ACDA report states that previous Soviet space arms control initiatives proposing that "piloted" spacecraft not be used for military purposes" could be intended to constrain the use of the Space Shuttle for military purposes.

Is it the DoD position that U.S. military use of the Shuttle is non-negotiable?

Answer: The Space Shuttle is part of the U.S. National Space Transportation System (STS). The STS is not a weapon system and is not planned to be used in any military missions. In the years to come the STS will serve as the primary launch system for national security as well as civil space missions. As the launch system for many military payloads, the STS's contribution to national security will continue to grow as it replaces most of the expendable launch vehicles used by the military in the past. The STS will be used by the military to launch for example, communication, navigation, and meteorological satellites as well as some classified payloads. The STS increases our ability to support many defense programs, including our ability to monitor arms control agreements. In view of these factors, military use of the shuttle, along with its many civil applications, is essential.

Additionally, to allow negotiations on this matter would furthermore create a dangerous precedent. The United States insists on its right to use space for peaceful purposes, but includes in this definition all space systems that enhance the effectiveness of (terrestrial) operational forces. The planned use of the Space Shuttle falls into this category. By agreeing to negotiate that issue, the U.S. would tacitly permit questions to be raised about other essential (non-weapon) space systems.

QUESTIONS SUBMITTED BY SENATOR WEICKER

Question: Secretary Weinberger, my staff prepared the attached issue paper on the gap between defense strategy, capabilities and the budget. It is based on a paper entitled, "Reagan"s Defense Strategy: It's Unaffordable," which I presented to the Senate on March 29th, and portions of which appeared in the New York Times on April 15th. I would like to place it in the record and have you address its principal points in an appropriate fashion. I am particularly interested in having your response to five central questions listed below:

1) Is there a gap between strategy and capabilities and between capabilities and the budget?
2) If so, how large is the gap for the period covered by the five-year defense plan?
3) Why does the gap exist?
4) If Reagan defense budgets can't solve the problem and close the gap, then money is not the issue. What is the issue?
5) If the funding gap cannot be closed, then the time has come to review cur national security objectives and strategy and to terminate some major programs. Has there been any effort during your tenure in the Pentagon to devise a strategy and defense program that is attainable. If so, describe those efforts?

Answer: Obviously, we believe there is a gap between current capabilities and those the U.S. ought to have to defend its national security interests adequately. This gap motivated our proposals for substantial increases in spending for defense. It exists for a variety of reasons, primarily the steady growth in the Soviet threat over the last 20 years and the failure of the U.S. to keep pace with that growth.

The question of whether our five-year defense plan will close that gap can not be answered yes or no, because there is no unarguable link between any particular defense posture and high assurance of defeating any particular threat (or combination of threats). A large measure of judgment is involved in determining an acceptable level of risk. Each year during the planning phase of our Planning, Programming, and Budgeting System we begin with our national security interests and objectives and establish both long-term goals, which meet our needs with high confidence, and mid-term objectives, which balance risks within fiscal constraints. Our program will substantially improve capability in most important areas, but some objectives will remain to be met in the extended planning period. It represents the President's best judgment of an acceptable level of risk, given all factors.

One major point in your paper with which I take issue is the apparent belief that there is some alternative strategy we could pursue that would allow us to meet our commitment abroad at reduced funding levels. Every administration since the early 1960s has reviewed our national security objectives, strategy, and policies. Each has affirmed the need for a strong conventional defense capability in NATO, the ability to meet lesser threats in other parts of the world without jeopardizing NATO's defense, and naval forces adequate to permit us to conduct both military operations and commerce. None of those administrations was able to find a strategy for doing all those things with high confidence and low budgets.

QUESTIONS SUBMITTED BY SENATOR KASTEN

Industrial Base Expansion

Question: What steps have you taken, and what further steps can you take, to expand the industrial base in the country?

Answer: Although the Department of Defense (DoD) owns a number of industrial facilities including manufacturing tools and equipment, it is DoD policy, in accordance with law, to rely principally on the private sector for goods and services. To the extent that public facilities are involved, the DoD has a larger degree of control in industrial base management and investment activity. The condition of the private sector, however, is largely dependent upon the economic state of the country. With the exception of a very few industries, DoD has little, if any, direct influence on the overall health of the base.

The DoD has, however, undertaken a number of initiatives to improve the overall industrial base posture both in the public and private sectors. These initiatives cover a wide range of activity, from addressing concerns arising from increasing foreign dependency for critical and strategic materials, to highly publicized economic adjustment and development activity with special interest groups, industry associations and state and local governments. In assisting the private sector for example, the DoD has developed an economic model called the "Defense Economic Impact Modeling System" (DEIMS). Through this model we can provide planning information on defense requirements to private sector firms in order to alert these companies to sales opportunities as well as to encourage companies to add additional capacity where needed. The model will also permit the DoD to analyze the impact of alternative defense budgets on key industrial sectors, skilled labor categories, and raw material requirements.

The DoD is also pursuing several initiatives to improve the productivity of the industrial base by increasing the rate of infusion of new manufacturing technology and industrial equipment into the base. One of our primary thrusts is the DoD Manufacturing Technology Program referred to as MANTECH. MANTECH attempts to increase the productivity and responsiveness of the industrial base by investing in new manufacturing technology which has evolved from the R&D community but has not yet been applied in an economically viable manner on the production floor. MANTECH investments are necessary to reduce both the technical and fiscal risk associated with follow-on "factory floor" applications. Another major effort is a new program called the Industrial Modernization Incentives Program or IMIP. Its primary thrust is to increase defense contractor capital investment resulting in modern and efficient manufacturing facilities for the production of defense products. The primary goals are to improve productivity and reduce acquisition costs. This employs a contracting strategy which attempts to incentivize defense contractors to invest their own funds in modern, more productive capital equipment.

The DoD is now beginning to make effective use of certain authorities provided for under the Defense Production Act, specifically, Title III, which provides for industrial incentives to create or expand industry needed for national defense. DoD has decided to use Title III in those cases where the U.S. is unacceptably dependent on unstable foreign sources and the free market cannot respond in time to meet our needs. Congress has authorized $100 million for Title III projects during FY 85 and FY 86 for this purpose.

In order to improve industrial responsiveness, the DoD developed a surge program to be applied to certain high priority critical defense items. The essence of the approach is to require, as a contract stipulation, contractors to pre-stock material and fabricate, as necessary, production items for final assembly with the quantity being a function of the lead times required to sustain an increased production rate. The Congress has supported this initiative; the FY 85 budget HASC Authorization Bill contains $16.2 million and the SASC Authorization Bill includes $25.0 million.

Clearly, the efforts undertaken to date are small compared to what is ultimately required. The DoD is aggressively continuing to pursue every possible action to improve the industrial base. This past year the DoD completed special studies which have surfaced a number of generic issues for which action plans are now being formulated. Some actions will require added resources and in some instances policy changes must be pursued. In any event, "further steps" are needed but the process is continuous with no single solution in the offing.

Reserves

QUESTION: Many of us in Congress have been pushing for some time to improve the status of the Reserve establishment. There is now an Assistant Secretary of Defense for Reserve Affairs, and you have selected an intelligent, aggressive, and thoughtful young man, Mr. James Webb, to be the first to hold that position. We have made the decision, out of necessity perhaps, to rely more on the Reserves for the defense of the nation. A recent article by Philip Gold in *The Public Interest,* entitled "What the Reserve Can--and Can't Do" has pointed up some of the dangers of that reliance given the current state of the reserve establishment. The problem, according to Mr. Gold, is that the Reserve has never been stronger, never had better and more committed people. Yet according to testimony before this subcommittee less than a month ago, the Reserves have only something like 35 percent of the equipment necessary to do the job we would expect of them. Now Mr. Gold's article can be taken two ways. Opponents of relying on the Guard and Reserve can say they can't do the job and we need to stop shifting resources away from the regular establishment. Others, including myself, can say that because we have to rely on the Reserves, we need to shift more resources into the Reserve establishment. How do you see this debate? What are we doing to make sure that if we are going to depend on the Reserves, then we need to see them properly equipped?

ANSWER: Given the decision to rely more upon the Reserves for the defense of the Nation, as the question has correctly noted, the side of the debate that supports shifting more resources into the Guard and Reserve must be supported. It is unreasonable to expect the Guard and Reserve, or the Active force, to be able to do their jobs without resources commensurate with the missions assigned. When properly manned, trained, and equipped, the Reserve forces have demonstrated time and again, just as have the Regulars, at the risk and all too often at the cost of their lives, that they can and will perform as professionally as any other military force in existence.

The Reserve forces do not have all of the equipment that they need to meet wartime requirements but many of their shortages are prevalent throughout the Active service as well. Fiscal constraints simply will not allow immediate resolution to equipment deficiencies which have evolved over at least the past decade. Therefore, to ensure that the Guard and Reserve have equal claim with the Active forces on modern, state-of-the-art equipment, Department policy prescribes that equipment will be distributed beginning with those units needed first upon mobilization, irrespective of Active, Guard, or Reserve component. Furthermore, equipping must be used in its broadest sense -- the resources needed to get the job done in peacetime as well as in war.

The results of this emphasis are becoming evident. New equipment is entering the Guard and Reserve inventories, such as the M1 tank, C-130H aircraft, guided missile frigates, and the Blackhawk helicopters. Over $2 billion is programmed for Guard and Reserve equipment procurement in fiscal year 1985, which, although not the complete answer by any means, certainly is progress and it is the Department's intent to sustain this program in the years to come.

Grand Strategy

There have been a number of articles recently that are highly critical of US strategy as it has evolved under the present administration. The winter issue of International Security carries two such pieces, one by Jeff Record called "Jousting with Unreality" and another by Joshua Epstein on "Horizontal Escalation." Robert Komer has criticized our reliance on maritime strategy. How do you respond to these critiques?

ANSWER: Let me first address Mr. Record's article which charged that this Administration espouses a "militarily unsound" strategy of "worldwide war." There is no such strategy. Our strategy is to deter, not wage, war. Even so, a deterrence strategy would be "militarily unsound" if we failed to maintain the necessary strength to convince a potential aggressor that we were capable of defending our interests so that nothing could be gained from aggression. While one could question the soundness of US strategy during the 1970s, when the United States was neglecting its defenses, we now have a defense program that offers a prudent and reasonable means of restoring the strength necessary for a credible deterrent.

Of course, a credible deterrent requires that potential aggressors know we can and will fight if deterrence fails. Mr. Record questions our strategy for fighting to restore the peace, implying that we seek to fight a global war. Yet he never refers to the FY 84 Annual Report (page 35) which states the central principle of our strategy in the event that deterrence fails: "In employing military force to restore the peace, the Reagan Administration seeks to limit the scope, duration, and intensity of conflict." We seek not to widen war, but to limit conflict and end it as quickly as possible.

Just as Mr. Record offers no answers to those difficult questions, he presents no alternative to a strategy that he terms too ambitious. Instead he criticizes the Reagan strategy for lacking a sense of priorities and for neglecting Western Europe while planning to fight simultaneously in all theaters. On the contrary, we consider the security and well-being of Europe to be absolutely vital to US national security. And we do recognize that forces are not available to defend everywhere against all threats at the same time. Our strategy, as further clarified in the FY 85 Annual Report (page 38), provides that "...should deterrence fail, our general strategic priorities, the specific circumstances, and the forces available at the time will govern force employment."

While Mr. Record claims that our strategy is too all-encompassing, Mr. Epstein reduces it to the narrowly defined concept of horizontal escalation. Like Mr. Record, Mr. Epstein regrettably also ignores the explicit statement of our strategy in the FY 84 Annual Report. There we discuss limiting the scope of conflict, not widening it geographically, to restore the peace. But if we are to deter the Soviets from starting a conflict, particularly in areas where they have an apparent geostrategic advantage, we should complicate their planning by creating uncertainty as to our response. They should perceive that the outcome of their aggression is in doubt, the risks unacceptable, and the costs too high.

I find it most curious that Mr. Record and Mr. Epstein both fail to refer to our FY 84 Annual Report, which has been available for over a year now and has been reinforced by the FY 85 Annual Report.

With respect to Ambassador Komer's criticism, we do not have an over-reliance on a maritime strategy. Naval forces are, of course, a vital component of our strategy. They support our forward defense posture. Operating in concert with land-based air forces and with the maritime forces of our allies, US naval forces preserve access to vital ocean areas and protect the sea lanes we depend upon to reinforce US and allied forces overseas. Unfortunately, when this Administration took office, we found major weaknesses in this vital component of our strategy. We deemed the size of our naval force inadequate to support America's worldwide national security interests. So what Ambassador Komer perceives as a reliance on a maritime strategy is really an effort to redress past decisions that caused the number of ships to atrophy below an acceptable level.

QUESTIONS SUBMITTED BY SENATOR STENNIS

Question: Considering the important role that the Reserve Components play in the total force, why is procurement funding for the Reserve Components being reduced in the 1985 budget?

Answer: Equipment is distributed to all components, Active and Reserve, on a first to fight basis. It is not distributed according to any arbitrary percentage factors or formulas. Therefore, the percentage of funds for the Reserve Components will vary from year to year. The important thing is that the Services do plan to provide the Reserve Components with over two billion in new equipment for both FY 1984 and FY 1985.

It is interesting to note that one of the major reasons for the apparent decrease in Reserve Component equipment funding is an acceleration of M1 tank deliveries to the Army National Guard. Tanks planned for distribution to the Army National Guard from the FY 1985 buy are now planned to be delivered from the FY 1984 buy. This has the effect of increasing the FY 1984 figures and decreasing the FY 1985 figures.

Distribution of Equipment to Reserve Components

QUESTION: Actual issuance of equipment to the Reserve Components is less than announced DoD plans. For example, DoD has published a comparison between the DoD distribution plan for 1983 and the actual equipment issued to the Reserve Components. In 1983, DoD planned to issue equipment worth $998 million, but only $630 million worth of equipment was actually issued! Thus, there was a shortfall of 36.9%, or $368 million, in equipment for the Reserve Components. Why did this shortfall occur? Is this the result of a DoD decision to reduce Reserve Component support?

ANSWER: The shortfall did not occur as a result of a DoD decision but rather as a result of several sets of circumstances taking place within the individual services. As reported in the analysis of the FY 1985

National Guard and Reserve Equipment Report, these circumstances include the diversion of planned distribution, or withdrawal, of equipment to higher priority claimants; equipment procurement/distribution which was cancelled, reduced, or delayed, primarily as a result of budgetary actions; and equipment requirements that were eliminated, reduced, or revised.

QUESTION: Can we expect that planned equipment deliveries to the Reserve Components in 1984 will fall short by a similar amount?

ANSWER: While the plan for equipment deliveries to the Reserve Components, as reflected for FY 1984, certainly expresses the Department's execution intent, the actual execution of such a plan must allow sufficient flexibility to accommodate the realities presented by such things as changing priorities, requirements, and production schedules, as indicated above. Thus, it is not possible to determine at this time a FY 1984 variance of execution to plan figure for this very dynamic program area.

Roland Air Defense Missile System

Question: Why was this decision made?

Answer: The Roland short range air defense system (SHORAD) was originally cancelled because the acquisition and support cost grew to a point where they exceeded the operational benefit that could be derived from the system. The systems that were produced up to the point of cancellation were transferred to the National Guard. However, the operational support cost for this system was over four times that of the Chaparral, an alternative SHORAD, with which other National Guard Air Defense units are equipped. Further, this would have been a unique system in the National Guard and difficult to support with a training base which would have been dependent on a large amount of contractor support through the life of the system.

Question: What will the Army do with the Roland equipment?

Answer: Present plans call for including this equipment in cooperative NATO Air Defense agreement with European countries who employ the European version of the Roland weapon system.

CAPTOR

Question: What will be the fiscal year 1985 termination cost to close down this production line?

Answer: Contractor and internal termination costs are estimated at $35 million.

Question: Are any funds included in the fiscal year 1985 budget for termination costs of CAPTOR?

Answer: The January submission of the fiscal year 1985 President's budget did fully fund the fiscal year 1985 CAPTOR buy and termination costs. The May revision to the budget does not include funding for the termination costs.

Question: What is your estimate of the cost advantage provided by exercising this option as opposed to negotiating a new contract for production of 300 CAPTOR mines in fiscal year 1985?
Answer: The cost advantage provided by exercising this option is $1 million.

Question: It is my understanding that the deliveries from the 1984 program will provide the Navy an inventory of about one-half of their programmed objective. Is it your belief that this level of CAPTOR mines is adquate in view of the expanding Soviet submarine fleet?
Answer: The inventory of CAPTOR mines MK 60 will be [deleted] after delivery of the units to be ordered in FY84. It is not sufficient to provide the capability envisioned in the deployment plan which resulted in an objective of (d) CAPTOR mines. The decision to terminate was made on the basis of competing requirements for funds. Follow-on operational evaluation of CAPTOR MOD 1 units in 1982 against US submarines rigged to simulate quiet Soviet acoustic levels raised certain issues with respect to the performance envelope of the CAPTOR MOD 1 unit. An extensive analysis was done to examine the potential for a product improvement program to upgrade CAPTOR performance. The evaluation examined both new production and retrofit of this new configuration and it was judged not cost effective. The number is not adequate, but the decision to recommend areas for reduction in our budget was based on considerations apart from the adequacy of that budget.

Question: Do you believe the inventory level of CAPTOR mines provides adequate capability for the various areas of the world that CAPTOR has been deployed?
Answer: The number in inventory at the conclusion of the FY84 procurement will total (d) and it could not be characterized as adequate. It meets our highest priority needs and was an appropriate decision based on fiscal constraints.

QUESTIONS SUBMITTED BY SENATOR INOUYE

CAPTOR

Question: Your budget revision has recommended termination of the CAPTOR deep water mine program. I am advised our inventory for this weapon falls far short of the objective which the Navy has validated as required for the deep water mine mission. Is it your understanding that the Navy feels it has an adequate number of CAPTOR mines in its inventory or on order to meet its inventory objectives?
Answer: The current objective for CAPTOR MK 60 is approximately (d) and if production is terminated at the end of FY85 this would result in an inventory of (d) . Follow-on operational evaluation of CAPTOR MOD 1 units in 1982 against US submarines rigged to simulate quiet Soviet acoustic level raised certain issues with

respect to the performance envelope of the CAPTOR MOD 1 unit. An extensive analysis was done to examine the potential for a product improvement program to upgrade CAPTOR performance. The evaluation examined both new production and retrofit of this new configuration and it was judged not cost effective. The decision to terminate procurement of the MOD 1 configuration was based on fiscal constraints.

Question: Would you compare our understanding of how the Soviet Union would employ deep water mines in their anti-submarine warfare mission as opposed to our plans.

Answer: [Deleted].

Question: What is our assessment of the inventory levels of the Soviet Navy's deep water mines as opposed to our inventory.

Answer: [Deleted.] In general, the Soviets, however, have traditionally placed greater emphasis than we on all aspects of mine warfare. It is prudent, therefore, to estimate that their inventory of deep water mines is significantly greater than ours.

SUBCOMMITTEE RECESS

Senator STEVENS. Thank you all very much.

[Whereupon, at 12:15 p.m., Thursday, May 24, the subcommittee was recessed, to reconvene at the call of the Chair.]

LIST OF WITNESSES, COMMUNICATIONS, AND PREPARED STATEMENTS

Page

Abrahamson, Lt. Gen. James A., Director, Strategic Defense Initiative Organization 310
  Prepared statement 314

Berkman, Maj. Gen. William R., USA, Chief, Army Reserve 132
  Prepared statement 135

Cann, Gerald A., Principal Deputy Assistant Secretary of the Navy for Research, Engineering and Systems 375
Chen, Martin F., Principal Deputy Assistant Secretary of the Air Force for Research, Development and Logistics 375
Conaway, Maj. Gen. John B., USAF, Director, Air National Guard 142
  Prepared statement 145
Cooper, Robert S., Ph.D., Director, Defense Advanced Research Projects Agency 289
  Prepared statement 293

Dean, Brig. Gen. Richard D., USA, Deputy Director, Army National Guard 183
  Biographical sketch 200
  Prepared statement 186
DeLauer, Hon. Richard D., Under Secretary of Defense for Research and Engineering 375
  Memoranda from 403
  Prepared statement 379

Gill, Maj. Gen. Sloan, USAF, Chief, Air Force Reserve 150
  Biographical sketch 157
  Prepared statement 154

Kempf, Rear Adm. C. J., USN, Director, Naval Reserve 160
  Prepared statement 162
Korb, Hon. Lawrence J., Assistant Secretary of Defense (Manpower, Installations and Logistics) 1
  Prepared statement 14

Millet, Franklin, Director, Strategic Forces Policy, Office of Secretary of Defense 310

Olmstead, Maj. Gen. Stephen G., USMC, Deputy Chief of Staff for Reserve Affairs 173
  Prepared statement 174

Philbin, Edward J., Deputy Assistant Secretary of Defense for Reserve Affairs 101
  Prepared statement 105

Sculley, Hon. Jay R., Assistant Secretary of the Army for Research, Development and Acquisition 375

Vessey, Gen. John W., Jr., Chairman, Joint Chiefs of Staff 464
  Prepared statement 466

Wade, James P., Jr., Acting Under Secretary of Defense for Research and Engineering, memoranda from 429, 432, 433, 434
Walker, Lt. Gen. Emmett H., Jr., USA, Chief, National Guard Bureau 115
  Biographical sketch 131

Page
Walker, Lt. Gen. Emmett H., Jr., USA, Chief, National Guard Bureau—Continued
    Prepared statement 117
Weinberger, Hon. Caspar W., Secretary of Defense 441
    Prepared statement 449

SUBJECT INDEX

DEFENSE MANPOWER REQUIREMENTS

Assistant Secretary of Defense (Manpower, Installations and Logistics)

Page
Additional committee questions 34
Aviators, shortage of 31
Budget request 1
  Reductions in 24
Civilian components 4
  Pay in military, comparisons of 19, 36, 38
  Allowances, cuts in 28
Compensation improvements 2
  Levels in 3
Contractors 42
Defense Audit Service study 32
Delayed entry program 44, 46
End strength increases 21, 34, 73
  Europe 25
Enlistment bonuses 3, 43
Housing costs, 1-year increases in 19, 72
  BAQ total 20, 96
Management headquarters reductions 4
Manpower account 23, 34
Military force structure, strengths in 3
Military personnel costs 30, 84
NATO:
  Air Force troop increases 24
  5-year plan end strengths 27, 35
  Personnel participation, increases in 22, 25
  Support function personnel increases 27
Officers, pay and allowances for 30, 39
Pay raise calculations 85
Permanent change of station, reimbursement for expenses of 3 , 66, 81
Physicians and dentists 69
Recruiting 2
Reenlistment rates 2, 40
Sea pay 70
Selected Reserve strengths 2
Selective reenlistment bonuses 32, 48, 64
Special and incentive pay increases 4
Subsistence 80
Travel 82
Variable housing allowances 18, 32, 39, 94
VHA budget 29

FISCAL YEAR 1985 BUDGET REVIEW

Secretary of Defense

Additional committee questions 506
Budget request 441, 506
C-5/C-17 aircraft 513, 518
Cash flows, projected 474
Central America problems 487
Conventional modernization 458

Page

Defense Contract Audit Agency, actions against director of ... 485
Defense contractors, cash payments to ... 474
Deterrence, strengthening of ... 444
ELV ... 529
Grace Commission proposals ... 473, 475
Guard and Reserve, equipment problems for ... 492, 526
Helicopter program ... 514
Inouye, Hon. Daniel K., U.S. Senator from Hawaii, questions submitted by ... 544
Joint Chiefs of Staff:
  Budget adjustments ... 464
  Chemical munitions strategy ... 469
  Conventional forces ... 469
  Force readiness and sustainability ... 468, 512
  People programs ... 470
  Soviet military threat ... 466
  Strategic forces ... 468
  U.S. defensive strategy ... 467
  Weaponry, Soviet advances in ... 464
Kasten, Hon. Robert W., Jr., U.S. Senator from Wisconsin, questions submitted by ... 538
M-1 tank:
  Capability ... 479
  Engine ... 484, 494
  Production ... 489
  Second sourcing on ... 493
Management improvements ... 445, 448, 461
Military reforms ... 504
MX missile ... 447, 483, 507
  Reduction of ... 472
NATO:
  Budget, increase in ... 490, 502, 523
  Importance to United States ... 502
  Troop reductions ... 498
  U.S. commitment to ... 492, 523
Personnel costs ... 479, 498, 501, 503, 520
Personnel recruitment and retention ... 447
Procurement program ... 483, 512
Program cancellations ... 476
Program reductions ... 447, 453
Readiness and sustainability goals ... 446, 457, 480
Saudi Arabia, sales of Stinger missiles to ... 486
Service warfighting requirements ... 482
Soviet:
  Arms control agreements, violations of ... 496
  Missile submarines, deployment of ... 495
  Nuclear buildup ... 443, 450
  Threat of U.S., declassification of information on ... 495
Space program, budget cuts in ... 488
Specialty metal procurement requirement ... 490
Starrett case ... 497
Stennis, Hon. John C., U.S. Senator from Mississippi, questions submitted by ... 542
Strategic defense initiative ... 509
Strategic modernization ... 460
Systemic procurement reform ... 481
TRIAD modernization ... 445
Turbine engine procurement ... 481
U.S. worldwide commitments ... 471
Variable housing allowance ... 498, 500
Wage increases in United States since 1970 ... 501
Warranties ... 477
Weicker, Hon. Lowell P., Jr., U.S. Senator from Connecticut, questions submitted by ... 537

JOINT WEAPONS PROGRAMS

Under Secretary of Defense for Research and Engineering

Page
Additional committee questions 415
AMRAAM missile system 388, 413, 417
  Program existence 390
  Program managers of 393
Army and Marine Corps weapons requirements 395
Attack of Follow-on Forces 377
Chemical weapons 387
Data package 397
Europe, air threat survivability in 386
Front-end joining 410
Germany, unsheltered aircraft in 387
Guidelines on program candidates, GAO recommendation for 411
HARM missile system 400, 426
Hawk missile, British purchase of 399
Joint activities 376, 415
Joint Management Requirement Board, recommendation for creation of 408
  JVX program 407, 414
  LAW program 395
JTACMS 422
NATO air base defense 385
Navy jet training systems 398
Patriot missile system costs 386
Penguin missile system 436
Rudman, Hon. Warren, U.S. Senator from New Hampshire, questions submitted by 436
SMAW program 395
T-38 aircraft, replacement of 399, 437
Tomahawk missile system 396, 421
  Technology transfer of 398
VHSIC 435
Warranties, support of 412
Weapon technology, advancements in 376

RESERVE AFFAIRS

Deputy Assistant Secretary of Defense for Reserve Affairs

Accrual accounting basis 215
Additional committee questions 221
Aging aircraft inventory 103
Air Force Reserve:
  Aircraft modernization programs 150
  Airlift programs 151, 154
  Combat and mission support 152, 155
  Effectiveness of 150
  Equipped flying units 150
  Operation and maintenance functions 153, 157
  Overall manning 152
  Special operations and rescue reservists 152, 155
  Training programs 151
Air National Guard:
  Alaska unit accomplishments 143
  C-141 cargo aircraft 144
  Equipment problems 143
  Incentive programs, funding of 142
  Military personnel requirements 148
  Modernization packages 143, 144
  Operation and maintenance requirements 147
  Readiness, high state of 142
  Re-engining program 143
  Robusting units 144
  Unit deployment 142
Army National Guard:
  Budget 198

Page

- Army National Guard—Continued
  - Equipment shortages 184
  - Federal missions 187
  - Manning 184, 270
  - Readiness trends 183, 184
  - State missions 186, 269
  - Strengths, increase in 183
  - Training programs 184
- Army Reserve:
  - Command and control 141
  - Contributions of 132
  - Deployment capability 135
  - Full-time unit support programs 133
  - Health professions scholarship program 139
  - Individual Ready Reserve (IRR) 133, 137
  - Management 141
  - Operation and maintenance 140
  - Paid drill strengths 132, 136
  - Ready Reserve incentive programs 133
  - Readiness 207
  - Recruiter support 138
  - Reserve Officers Training Corps (ROTC) 139
  - Strength incentive programs 137
  - Supplies and equipment 133, 140, 209, 237
- Basic quarters allowance 216
- Budget request 101
- C-5 cargo aircraft, refueling 203, 218, 220
- C-130 cargo aircraft 219, 220
- C-141 cargo aircraft, refueling 203, 218
- Compensation/entitlements 109
- Congressional Research Service report 210
- D'Amato, Hon. Alphonse M., U.S. Senator from New York, questions submitted by 239
- End strengths 206, 221
- Equipment shortages priority 207, 209, 231, 234
- F-4 aircraft, upgrading of 201
  - Re-engining 210
- F-4D, useful life of 202
- F-15 aircraft 211
- Force mix 112
- Full-time manning 201
- Guard and Reserve units, comparative costs of 103, 211, 223, 233, 261, 280
  - Equipment 111, 232
- Leahy, Hon. Patrick J., U.S. Senator from Vermont, questions submitted by 274
- Manpower and equipment status 103
- Marine Corps Reserve:
  - Mobilization and operational readiness 181
  - Perspective of 174, 238
  - Recruitment programs 173
  - Status of 173, 176
  - Structure modernization and enhancement 179
- Medical needs 226
- Military pay item 214
  - Regular compensation 217
- Mobilization, individual manpower for 108
- National Guard Bureau:
  - Equipping and sustaining of 122, 275
  - Guardsmen, reliance on 115
  - Manning policies 119
  - Nuclear capable artillery battalions 115
  - Organizing activities 117
  - Readying and mobilizing 130
  - Training practices 125, 276
- NATO spending commitment 213
- Naval Reserve:
  - Fiscal year 1985 program 165
  - Force structure and equipment 167, 235
  - Funding request 170

Page

- Naval Reserve—Continued
  - Mission of 162
  - Modernization growth 160
  - Operation and maintenance 161
  - Readiness 160
  - Recruitment activities 160
- Other items 110
- Quarters, basic allowance for 109, 224
- Reserve components, activities of 102, 277
  - Support for 204
- Reserve Personnel Management Act 110
- Retirement programs 214
- Rudman, Hon. Warren, U.S. Senator from New Hampshire, questions submitted by 268
- Seabees 204
- Selected Reserve strength 105
- Stock fund, status of 208
- Vermont Guard units, clothing needs of 205

SPACE PROGRAMS

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY (DARPA)

- ASAT programs 291, 348
- Budget request 289, 338
  - Changes in 290
- Consolidated space operation center 291, 353
- Expendable launch vehicle 291, 340, 350
- Milstar program 291, 355
- Research and technology 305
- Space operations, consolidation of 290
  - Support for 299
- Space plane 351
- Space systems 301
  - Surveillance and defense 303
- Space technology activities 292, 294
- Strategic Defense Initiative Program 308, 344, 360, 362, 366, 370

STRATEGIC DEFENSE INITIATIVE ORGANIZATION

- Additional committee questions 338
- Ballistic missile defense area, Soviet efforts in 312
- British and French nuclear arsenals, disarming of 332
- Countermeasures 323
- Defense, concept of 316
- DSCS 352, 356
- ELV 340, 350
- F-16 program 334
- Future action, options for 335
- Kasten, Hon. Robert W., Jr., U.S. Senator from Wisconsin, questions submitted by 360
- LODE program 324
- Management 321
- Nuclear deterrence, goal of 329
- Objectives of 310
- Offensive and defensive capabilities 331
- Ongoing programs, funding for 323
- Program:
  - Goals 310, 311, 314, 326
  - Phases of 330
- Proposed funding 312, 315
- Proxmire, Hon. William, U.S. Senator from Wisconsin, questions submitted by 363
- Shuttle cost growth 338
- Space-based laser 323
- Space budget 322, 338
- Increases 333

Page
Stennis, Hon. John C., U.S. Senator from Mississippi, questions submitted by .. 362
Technologies research 310, 312, 317
    Options 325